

CALL NO. 104

CONTRACT ID. 131076

POWELL COUNTY

FED/STATE PROJECT NUMBER STP BRO 5260(035)

DESCRIPTION STANTON-SLADE ROAD(KY 11)

WORK TYPE BRIDGE REPLACEMENT

PRIMARY COMPLETION DATE 41 WORKING DAYS

LETTING DATE: November 22,2013

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 EASTERN DAYLIGHT TIME November 22,2013. Bids will be publicly announced at 10:00 EASTERN DAYLIGHT TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 3%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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ADMINISTRATIVE DISTRICT - 10

CONTRACT ID - 131076 STP BRO 5260(035)

COUNTY - POWELL

PCN - DE09900111376 STP BRO 5260(035)

STANTON-SLADE ROAD(KY 11) REPLACE BRIDGE AND APPROACHES ON KY-11 OVER MIDDLE FORK OF RED RIVER SE OF BERT T. COMBS PARKWAY UNDERPASS.BRIDGE REPLACEMENT SYP NO. 10-01085.00.

GEOGRAPHIC COORDINATES LATITUDE 37:48:13.00 LONGITUDE 83:42:33.00

COMPLETION DATE(S):

41 WORKING DAYS

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR PIPE INSPECTION

Contrary to Section 701.03.08 of the 2012 Standard Specifications for Road and Bridge Construction and Kentucky Method 64-114, certification by the Kentucky Transportation Center for prequalified Contractors to perform laser/video inspection is not required on this contract. It will continue to be a requirement for the Contractor performing any laser/video pipe inspection to be prequalified for this specialized item with the Kentucky Transportation Cabinet-Division of Construction Procurement.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The Kentucky Division of Forestry has imposed a quarantine in Anderson, Boone, Bourbon, Boyd, Boyle, Bracken, Campbell, Carroll, Fayette, Franklin, Gallatin, Garrard,

Grant, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Kenton, Oldham, Owen, Pendleton, Scott, Shelby, Trimble, and Woodford Counties to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the county of its origin. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/29/12



Steven L. Beshear Governor Lori H. Flanery Secretary

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785

SECRETARY'S ORDER 11-004

FINANCE AND ADMINISTRATION CABINET

Vendor Document Disclosure

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

NOW, THEREFORE, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.08 Irregular Proposals 102.14 Disqualification of Bidders

102.09 Proposal Guaranty

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of _____ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 63-35 DBE, within 10 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

09/14/11

POWELL COUNTY STP BRO 5260(035)

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ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.



www.transportation.ky.gov/

Steven L. Beshear Governor Michael W. Hancock, P.E. Secretary

MEMORANDUM

TO: Jeff Allen, Environmental Coordinator

District 10 - Jackson

FROM: Brittany Stratton, Geologist 1

UST/Hazmat Section

DATE: 8/8/13

SUBJECT: Asbestos Inspection Report for Powell County

Bridge on KY-11 over Red River

Item No. 10-1085

This report is prepared to accompany the 10-day NOI for Demolition to the Division of Air Quality.

Please include all pages with submittal

Project and Structure Information

County: Powell

Bridge #099800039N

Description: Bridge inspected for asbestos containing materials (ACM's)

Results

<u>Span Concrete:</u> tested negative for asbestos <u>Abutment Concrete:</u> tested negative for asbestos

Conclusions

All samples tested negative for asbestos containing materials (ACM). No abatement is required.



MRS, INC.

MRS, Inc. Analytical Laboratory Division

332 West Broadway, Suite 613 Louisville, Kentucky 40202

(502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Analysis N#	211208068	Address:	KY 11 Over Red River - Powell
Client Name:	Transportation Cabinet		Bridge # B 0039
Sampled By:	Brittany Stratton	_	Item # 10-1085

SAMPLE APPEARANCE			%	FIBROUS	ASBESTOS		% NON-ASBESTOS FIBERS				
Number	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Other	Cellulose	Fiberglass	Syn. Fiber	Other/Mat
# 1	Gray	Yes	No				None				100%
# 2	Gray	Yes	No				None				100%
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Methodo	logy:	: EPA	Method	600/	'R-93-116
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Date Analyzed ::

6-Aug-13

Analyst

Winterford Mensah

Reviewed By:

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AJHA #1 02459

			31	0	0	Sample #			
				Span Conclete	Abutment Concrete	Location			Louisville, Ky 40259 Tel # (502) 495-1212, Fax # (502) 491-7111 Chain Of Custody Form
Results Code: ND = None Detected FTD = Filter Tampening or Damage NA = Not Applicable				8.00	3.00	Start Tim	e		91-7111 ==
le: Detected Tampering					E. Tite	End Time			
) or Damage						Time (m)	HT SER	Description Special Note	Project Location Project
		П				Flow Rate	e (L/m)	Please s Brittany	L .
	<u> </u>					Volume (l	L)	Please send results electron Brittanv.stratton@ky.gov Point count any results be	Ja No /
Details				×	×	Asbestos- PLM		Please send results electronicallt to: Brittanv.stratton@ky.gov Point count any results between 1% and 4%	189-11 over Red Liver
						Asbestos- Point Count	An	1% and 4%	-Powell
						Lead-Total Lead	Analysis Required	Date Received By: Received By: Signature	
						Metats & TCLP Metals		Date Received & J. Will 2 Min to Good M. Signature	-12/2

Special Note for Bridge Demolition, Renovation and Asbestos Abatement

If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.

Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.

	Right-of-Way Certification Form	evised 9/3/08
🛛 Federal Fu	ınded Original	
State Fund	led Re-Certification	
Interstate, Appa projects that fal	t be completed and submitted to FHWA with the PS&E package for federal-aid funded alachia, and Mega projects. This form shall also be submitted to FHWA for <u>all</u> federal-aid Il under conditions No. 2 & 3 outlined elsewhere in this form. For all other federal-aid orm shall be completed and retained in the KYTC project file.	
Date:	16 July 2 5 13	
Project # Item #: Letting Da	#: 12 FO FD52 99 8304601R	
Projects that	t require NO new or additional right-of-way acquisitions and/or relocations	5
	The proposed transportation improvement will be built within the existing rights-of -way and the are no properties to be acquired, individuals and families ("relocatees") to be relocated, or improvements to be removed as a part of this project.	ere
Projects that	t require new or additional right-of -way acquisitions and/or relocations	
	Per 23 CFR 635.309, the KYTC hereby certify that all relocatees have been relocated to decent safe, and sanitary housing or that KYTC has made available to relocatees adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administration of the Highway Relocation Assistance Program and that at least one of the following three conditions has been met. (Check those that apply.)	
<u> </u>	1. All necessary rights-of-way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining or the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish these improvements and en on all land. Fair market value has been paid or deposited with the court.	n
	2. Although all necessary rights-of-way have not been fully acquired, the right to occupy and use all rights-of-way required for the proper execution of the project has been acquired. Trial appeal of some parcels may be pending in court and on other parcels full legal possession has been obtained, but an Interlocutory Judgment has been granted, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, demolish these improvements. Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to start of construction. (See note.)	or not , or art
	KYTC shall re-submit a <u>right-of-way re-certification</u> form for this project prior to the start of struction(Notice to Proceed), verifying that fair market value for all parcels has been paid or the court.	

Right-of-Way Certification Form

3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with physical construction even thought the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair marked value will not be paid or deposited with the court for some parcels at the start of construction. KYTC will fully meet all the requirements outlined in 23 CFR 309(c) (3) and 49 CFR 102(j) and will expedite completion of all acquisitions, relocations, and full payments after construction starts. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA consideration and approval. (See note.)

Note: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to construction of projects on this basis shall be the exception and never become the rule. In all FHWA-approved cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition, payment for all affected parcels, and the relocation of all relocatees promptly 30 days after start of construction.

District ROW Supervisor Approved: Bruce K. Napier Approved Printed Name Approved: Keigh McDongld Director of ROW & Utilities or Designee Vame Approved 2013 Stewardship Agreement Down FHWA, Right-of-Way Officer

Page 2

Right-of-Way Certification Form

88	oject #: 12 FO Item #: 10-1085. g Date: 15 May 2			POWELL BRO-5260 (3	36)	
	Parcels were acq Parcels have bee value has been d Parcels have not Proceed for cons Parcels have bee has not been pos parcels require a Some displacees	uired by a signed fee simple on acquired through condemna eposited with the court (Type been acquired at this time but truction. (explain below for each acquired or have a "right of ted with the court, and they can explanations below for each have not been relocated from below for each parcel) (notes	eed and fair mar tion and IOJ gran 1 certification) t can be Re-certich parcel) (Type Entry" but the fan not be re-certifione as well as Fall	ket value has be need by the cou- fied as acquired 2 certification ir market value ied prior to cou-	een paid (Type 1) rt and fair market d prior to Notice to n) e has not been paid onstruction. (These	
Parcel #	Name/Station		eyed acquisition, delayed ayment of fair market value relocation			
	-					
There are There are have been	wate	poards and/orer or monitoring wells on pare the responsibility of the project			ect. andAl	

Contract ID: 131076 Page 25 of 128

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

POWELL COUNTY, BRO 5260 (037) FD52 099 8304601U SLADE-NADA (KY 11) Item No. 10-1085.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Clark Co. RECC has no significant utility relocation work required to complete the project.

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

AT&T KY will be relocating facilities on above subject project. Existing facilities should not be disturbed At the following stations: 25' Lft/Rt CL. Sta. 50 + 00 to 25' Lft/Rt CL. Sta. 62+00 until proposed cable installed (outside of Construction Zone)

Estimated relocation of AT&T facilities 3/15/14

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

None when applicable)

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

(None when applicable)

(NOTE: Use the following Text Only If Applicable) The Department will consider submission of a bid as the Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of (Utility Company(s) Name). Working days will not be charged for those days on which work on (Utility Company(s) Name) facilities is delayed, as provided in the current edition of the KY Standard Specifications for Road and Bridge Construction. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to the project, the KYTC Resident Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

POWELL COUNTY, BRO 5260 (037) FD52 099 8304601U SLADE-NADA (KY 11) Item No. 10-1085.00

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

The Powell Valley Water District's waterline and sewer installation follows: 800 L.F. of 6-inch PVC Water Line, Two (2) Reconnects to Existing 6-inch Water Line, 900 L.F. of 6-inch Sewer Line, Two (2) Reconnects to Existing 6-inch Sewer Line, 190 L.F. of 1.5-inch PVC Sewer Line, One (1) Reconnect to Existing 1.5-inch Sewer Line, 32 L.F. of 12-inch Casing Pipe, 90 4-inch Casing Pipe, 100 L.F. Type B Creek Crossing, One(1) Grass Surface Restoration, and Other Costs

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

POWELL COUNTY, BRO 5260 (037) FD52 099 8304601U SLADE-NADA (KY 11) Item No. 10-1085.00

<u>SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES</u>

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

POWELL COUNTY, BRO 5260 (037) FD52 099 8304601U SLADE-NADA (KY 11) Item No. 10-1085.00

AREA UTILITIES CONTACT LIST

Utility Company/AgencyContact NameContact InformationAT&T of KentuckyJackie Salyers, Jr.606 874 2715

606 663 5870

Powell Valley Water District Kendell Knox

PART 1. GENERAL

1.1 Work Included

The work called for by this section includes furnishing all labor, materials and equipment to install the water lines, valves and other accessories as shown on the plans and as specified herein.

1.2 Delivery and Storage

Notify the Engineer when pipe will be received on the job so that proper arrangements may be made for inspecting the unloading operations and examining the pipe materials.

PART 2. PRODUCTS

2.1 Polyvinyl Chloride Pipe and Fittings

A. Pipe. PVC pipe shall meet ASTM Specifications D-1784 for material and D-2241 for pipe, latest revisions. Pipe shall also meet all applicable provisions of the Product Standards and shall bear the National Sanitation Foundation (NSF) seal of approval in compliance with NSF Standard No. 14. PVC pipe having a maximum hydrostatic working pressure of 160 psi (SDR26), 200 psi (SDR21), 250 psi (SDR17), or 315 psi (SDR13.5) shall be used as required.

The workmanship, pipe dimensions and tolerances, outside diameters, wall thickness, eccentricity, sustained pressures (ASTM D-1598), burst pressures (ASTM D-1599), flattening, extrusion quality (ASTM D-2152), marking and all other requirements of the Product Standard PS 22-70 shall be conformed with in all respects.

Pipe shall be furnished in 20 foot or 40 foot lengths. The pipe may be double plain end or with bell on one end. Male ends of pipe must be beveled on the outside. Pipe shall have a ring painted around the male end or ends in such a manner as to allow field checking of setting depth of pipe in the socket.

Pipe shall be joined with slip-type joints with rubber gaskets. Pipes with bells shall have all part of the bell, including the gasket groove, made from the same extruded piece, integral with the pipe, and shall be thickened to meet standard dimension ratios of wall thickness to outside diameter. The gasket groove shall be constructed such that gasket rollout will not occur. Rubber gasket shall conform to ASTM 1869. Joint lubricant shall be of a type recommended by the manufacturer for their pipe. Lubricant shall be water soluble, nontoxic and have no objectionable properties.

B. Fittings. Cast or ductile iron mechanical joint or push-on type fittings with appropriate adapters shall be used with PVC pipe. All such fittings shall be approved by the pipe

manufacturer. Fittings shall comply with AWWA C-110 or C-111 and shall be manufactured for the size and pressure class of the line on which they are used. Use of transition gaskets will not be allowed unless specifically approved by the pipe manufacturer.

- 2.2 Municipal Polyvinyl Chloride (MPVC) Pressure Pipe
- A. Pipe. MPVC pipe shall meet the requirements of AWWA C-900 or C-905, latest revision, and shall be furnished in cast-iron pipe equivalent outside diameters with rubber-gasketed separate couplings.

MPVC pipe and couplings shall be made from Class 12454-A or Class 12454-B virgin compounds as defined in ASTM D-1784. The standard code designation shall be PVC 1120. The PVC compounds shall be tested and certified as suitable for potable water products by the NSF Testing Laboratory and shall carry the NSF approval marking.

Solvent-cement couplings or joints shall not be used. PVC joints using elastomeric gaskets shall be tested as assembled joints and shall meet the laboratory performance requirements specified in ASTM D-3139.

Pipe and couplings shall be marked with nominal size and OD base, material code designation (PVC 1120), dimension ratio number, AWWA pressure class, AWWA designation number (C900 or C905), manufacturers name or trademark and production record code; and seal of the NSF Laboratory.

Pipe shall be joined with slip-type joints with rubber gaskets in accordance with manufacturer's instruction.

B. Fittings. Fittings for municipal PVC shall be cast-iron or ductile iron only. Either push-on or mechanical joints may be used. Fittings shall be manufactured for the size and pressure class of the line on which they are used and shall comply with AWWA C-110 or C-111.

2.3 Ductile Iron Pipe

Ductile iron pipe shall be designed in accordance with AWWA 113 and for pressures and conditions as stated in these specifications or called for on the plans or bid documents. Ductile cast iron pipe shall conform to AWWA C-151. The net weight, class or nominal thickness and sampling period shall be marked on each pipe.

Mechanical joints are to be furnished according to AWWA Specifications C-111. All pipe joints must be furnished complete with all accessories. Mechanical joint bolts and nuts shall be of alloy cast iron or alloy steel (Corten type such as U.S. Alloy) or equal. Rubber gaskets shall be made of plain first grade rubber, free of imperfections and porosity. Hardness shall be 70 to 75 durometer. Rubber ring slip joints shall be equal to AWWA C-111.

All pipe for water service shall be bituminous coated outside and cement lined with seal coat on the inside per the above specifications. Cement mortar lining and bituminous seal coat inside shall conform to AWWA C-104.

Cast iron mechanical, rubber ring slip and flanged joints shall conform to AWWA C-110 for centrifugally cast iron water pipe. Mechanical joints shall also conform in all respects to AWWA C-111. Fittings shall be manufactured for the size and pressure class of the pipeline in which they are to be used. Fittings shall be bituminous coated outside and lined on the inside same as the line on which they are installed.

All cast iron flanged pipe shall have flanges faced and drilled, 125 pound in accordance with AWWA C-110 unless otherwise specified. Flanges may be cast integrally with the pipe or they may be screwed on specially designed long hub flanges, refaced across both face of flange and end of pipe. Flanged pipe shall be in accordance with AWWA C-106, and be the class called for on the plans or bid forms. Where plain ends of flanged and plain end pipe fit into mechanical joint bells, centrifugally cast pipe shall be used. Flanged pipe for water service shall be cement lined and bituminous coated the same as written herein for bell-joint pipe.

Flexible couplings for flanged pipe shall be a mechanical joint cast to a special flanged joint using a neoprene O-ring in place of the usual 1/16 inch rubber ring gasket. The mechanical bell and special flanged joint piece shall be of high grade gray cast iron in accordance with AWWA C-100. Mechanical joint follower flange shall be of ductile iron ASTM A399 or malleable iron ASTM A47, Grade 35018 or 32510, latest revision, with high strength/weight ratio design.

Bolts shall be fine grained high tensile malleable iron with malleable iron hexagon nut. Stainless steel nuts shall be used in vaults and wet wells.

2.4 River Crossing Pipe

River crossing pipe shall meet all provisions of ASA Specifications A-21.6. Pipe bells and glands shall be 70-50-05 ductile iron with suitable rubber sealing gaskets.

2.5 Gate Valves

A. Underground. All underground gate valves shall be of the resilient seat type, iron body, non-rising stem, fully bronze mounted, asphalt varnish coated outside and suitable for working water pressures of 200 PSI. Valves shall be of standard manufacture and of the highest quality both of materials and workmanship and shall conform to the latest revision of AWWA Specification C-509. Valves shall be furnished with bell, flanged or mechanical joint end connections suitable for connection to the pipe with which they are to be used.

Underground valves shall be nut operated, unless otherwise shown on the plans. All underground valves which have nuts deeper than 30 inches below the top of valve box shall have extended stems with nuts located within 2 feet of valve box cap.

B. Housed. Gate valves shall be resilient seat type, iron body, flanged, fully bronze mounted with O-ring seals, asphalt varnish or epoxy coated outside and suitable for working water pressures of 200 PSI. Valves shall be of standard manufacture and of the highest quality both of materials and workmanship and shall conform to the latest revision of AWWA Specification C-509. Unless otherwise shown on the plans, all housed gate valves shall be outside stem and yoke - handwheel operated.

Valve stand handwheels and handwheels on extended stems, shall have the same minimum diameters as those shown for handwheels directly on valves. Extension stems for O. S & Y valves shall be non-rising, with clamp to valve handwheel and hollow shaft for rising stem of valve, with adjustable cast iron guides per each ten (10) feet of extensions stem length. All extension stems shall be connected with suitable coupling castings for connection to and removal from valves and stands. Nuts and bolts on all extensions stem connections shall be stainless steel.

2.6 Check Valves

Check valves shall be swing gate type. All check valves shall be standard iron body with passage of full pipe area when swing gate is open. The valve shall be of the outside lever weight-operating type with an adjustable closure rate. The valve must be tight seating and must operate without hammer or shock. The seat ring or lining must be renewable. The valve should be bronze-mounted and may contain a rubber or neoprene lining in accordance with the manufacturer's recommendations.

2.7 Pressure Reducing Valves

Pressure reducing valves shall be hydraulically operated of the self-contained differential piston type. The valve body shall be cast iron of the globe or angle type. The valve is to be bronze fitted with renewable lining and seating components. The valve shall be pilot controlled and diaphragm operated. The valve shall be air and water cushioned to prevent hammer or shock. Bronze castings shall conform to ASTM B-62 and the cast iron body and lid shall conform to ASTM A-126, Class B.

2.8 Air Release Valves

A. Automatic Air Release Valves. A valve designed to automatically allow exhaust of small pockets of air from the water main while in use shall be installed where shown on the plans or where directed by the Engineer. The air release valve shall have a 3/4" iron pipe thread inlet, cast iron body construction, bronze trim, with all internal parts of stainless steel or bronze. The valve shall have an orifice size of 5/64" or greater. Valves shall be suitable for a working water pressure of 200 PSI. The air release valve shall be mounted on 3/4", Schedule 80, galvanized steel riser pipe. The riser pipe shall be connected to the water main by use of a service clamp and a corporation stop as shown in the standard details. The riser shall also have a 3/4", bronze gate valve with a tee-handle, solid wedge type, inside I.P. threads, suitable for a 200 PSI working

water pressure. Equipment shall be as manufactured by Mueller, Ford, Crane, Valve and Primer or approved equal.

B. Manually Operated Air Release Valves. A manually operated valve designed to allow for exhausting small pockets of air from the water main while in use shall be installed where shown on the plans or where directed by the Engineer.

The assembly consists of yoke or coppersetter of the type used for service meter installation. The setter shall be constructed from brass or copper materials in accordance with AWWA C-800. The setter shall have 5/8" angle meter stops or ball valves on both ends and shall be connected to the water main by use of polyethelene service tubing, two service clamps and two corporation stops as shown in the standard details.

2.9 Valve Boxes

All valves (gate, air release, check, etc.) installed underground shall be installed in a vertical position in an approved valve box.

Gate valve boxes shall be of a cast iron, two or three-piece, slip-type consisting of a base, a center section and a top section with a covered marked "WATER". Where valve box is constructed in a paved area, the box shall be a screw type box. The entire assembly shall be adjustable for elevation and shall be set vertically and be properly adjusted so that the cover will be flush with the finished grade.

Air release valves will be installed in the same type of box as is used for meters. As described in these specifications the box may be cast iron, concrete, or concrete pipe. The box must allow for adequate cover over the pipe at the installation.

Check valves installed underground will be installed in the meter box type installation using concrete pipe and a meter box cover. The installation will utilize a suitable pipe diameter to accommodate the valve and accessories in accordance with the standard details. The box must allow for adequate cover over the pipe at the installation.

2.10 Blow-off Assemblies

The blowoff pipe from the main to the flush valve shall be of the same material as the main and connected to the main by means of a tee. Do not use a corporation stop for this connection. The gate valve for the blow-off connection shall be a bronze gate valve with tee-handle, solid wedge type, inside I.P. threads. All pipe beyond the gate valve shall be galvanized iron pipe, Schedule 80, with Class 300 malleable iron fittings. Contractor shall install a length of hose in each valve box as shown in the Standard Details. The valve enclosure shall be constructed of an 18-inch diameter by 30-inch depth concrete or vitrified clay pipe or cylinder. The cover shall be of cast iron construction, 4 inches deep with a non-recessed lid, with cast letters "WATER" and a pentagon lock nut.

2.11 Fire Hydrants

All fire hydrants shall be of the compression type, with cast iron body, fully bronze-mounted, suitable for working pressure of 200 pounds per square inch and shall be in accordance with AWWA C-502. Hydrants shall have two 2-1/2" hose connections and a 4-1/2" steamer connection with National Standard threads.

Hydrants shall be constructed in a manner permitting withdrawal of internal working parts without disturbing barrel or casing. Hydrants shall have dry-top design and non-rising stem and be frost-proof. Valve, when shut, shall be reasonably tight if upper portion of barrel should be broken off. Waterway of hydrants shall be not less than 6" throughout and valve opening shall be at least 5 1/4" in diameter. There shall be no chattering under any conditions of operation. Each hydrant shall be tested to a hydrostatic pressure of 300 PSI with valve in both opened and closed position. The direction of opening shall be cast in the head of the hydrant. Hydrants shall be painted with one coat of red lead and two finishing coats of Koppers Ponkote Enamel for hydrants or approved equal, color to be selected by Engineer.

Hydrants shall have mechanical connection directly to lines. Valves supplied with hydrants shall have mechanical joints and may be connected directly to hydrant or may be on hydrant service as shown in the Standard Details. One operating and spanner wrench shall be furnished with each hydrant with a maximum of three provided on any one project. Extensions for extra depth shall be included in the cost of hydrants. One disassembly wrench shall be supplied for the project. Concrete thrust blocking, hydrant bedding and main line tee as shown in the Standard Details are to be included in the unit price for hydrant installation.

Hydrants shall be set so that outlets are not less than 15 inches above the ground, plumb and at a distance of 18 inches from the outside of the curb. If no curb exists, hydrant is to be set four feet from the property line or as shown on the plans.

PART 3. EXECUTION

3.1 Installation of Water Lines

A. General. Before any length of pipe is placed in the trench, make a careful inspection to see that no foreign material is in the pipe. All pipe shall be lowered carefully into the trench, properly aligned and properly jointed by use of suitable tools and equipment, in such manner as to prevent damage to water line materials and protective coatings and linings. Scratching of the exterior surface of the pipe will be cause for rejection of the pipe.

When pipe laying is not in progress, the open ends of pipe shall be closed to prevent entrance of trench water into the line. Whenever water is excluded from the interior of the pipe, adequate backfill shall be deposited on the pipe to prevent floating. Any pipe which has floated shall be removed from the trench and installed properly. No pipe shall be laid in water or on frozen trench bottom or whenever the trench conditions or the weather are unsuitable for such work.

If any defective pipe and fittings shall be discovered after the pipeline is installed, they shall be removed and replaced with a satisfactory pipe or fitting without additional charge to the Owner. Open ends of unfinished pipelines shall be securely plugged or closed at the end of each day's work or when the line is left temporarily at any other time.

B. Cast or Ductile Iron Pipe. Cast or ductile iron bolted joint, rubber ring slip joint, and ball and socket river crossing pipe shall first be thoroughly cleaned at joints, then joined according to manufacturer's instructions.

All pipes must be forced and held together, or "homed" at the joints, before sealing or bolting. Pipe must be aligned as each joint is placed, so as to present as nearly true, straight lines and grades as is practical, and all curves and changes in grades must be laid in such a manner that the maximum deflection is not exceeded at any joint.

When using pipe with push-on joints, care must be exercised to make certain that the correct gasket is being used for the type of joint installed and that the gasket faces the proper direction. Before inserting the gasket, the groove and bell socket should be carefully cleaned of all dirt. If sand or dirt is permitted to remain in the groove, leaks may occur. Lubricant must be applied to bell socket, gasket and plain-end of pipe as required by manufacturer. Plain-end must be beveled before joint is made. Deflection required at the joint shall be obtained after the joint is made.

B. PVC and MPVC Pipe. Where good bedding conditions are attained, PVC pipe smaller than four inches may be assembled outside the trench in longer sections (as conditions allow) and then lowered into the trench. At any time when improper bedding is discovered or the pipe is severely deflected the pipe will be removed from the trench and the condition corrected. Pipe in sizes four inch and above may be assembled outside the trench but must be lowered into the trench as each joint is assembled. Regardless of installation methods of couplings must be inspected after laying in trench for proper insertion and alignment. Field cuts and bevels will be allowed in accordance with the manufacturer's instructions for these operations.

Municipal PVC pipe of all sizes must be assembled in the trench in strict accordance with the manufacturer's requirements.

3.2 Thrust Blocking and Anchorage

All angles or bends in the pipeline, either vertical or horizontal, shall be braced or anchored against the tendency of movement with concrete thrust blocking. Where joint harness is used, all component parts shall be stainless steel. Thrust blocks shall not be attached to couplings.

3.3 Pipe Bedding

A. Standard Pipe Bedding. The standard pipe bedding shall be evenly spread fine granular earth material or bank run sand and gravel or dense graded aggregate in accordance with the following pipe materials and under normal stable earth trenching conditions:

PVC (4 inches and smaller), earth trench bottom (leveled)

PVC (above 4 inches) compacted earth backfill

Bedding

C.I. and D.I. (less than compacted earth backfill

4 inches)

Pipe

C.I. and D.I. (4 inches compacted crushed stone backfill

diameter and above)

B. Special Pipe Foundation. When directed by the Engineer, yielding and mucking material in subgrade shall be removed below ordinary trench depth in order to prepare a proper bed for the pipe. In such locations, a special pipe foundation shall be constructed utilizing encasement class concrete.

C. Standard Concrete Encasement. Concrete encasement of pipe shall be placed as directed by the Engineer. Concrete shall form a continuous bed under pipe. In tamping concrete, care should be taken not to disturb the grade or line of the pipe or injure the joints.

3.4 Water Line and Sewer Line Separation

A. Parallel Water and Sewer Lines. Water lines must, if possible, be located a minimum lateral distance of 10 feet from any existing or future sewer lines measured from outside diameters. Where water lines and sewer lines must be placed in the same trench, the water line must be located on a shelf, 2 feet above and 2 feet to the side of the sewer line. Whenever this condition cannot be met, and upon direction from the Engineer, the water line shall be uncovered and encased with concrete per the standard encasement detail.

B. Crossing Water and Sewer Lines. Wherever sewer lines and water lines cross, it is desirable, if practical, that the sewer line be at least 24 inches below the water line.

Where it is not practical to provide such a separation, care shall be taken to ascertain that the existing water line or existing sewer line is in good sound condition and that no evidence of joint leakage is known in that vicinity. If any such evidence does exist, expose the existing line at least 10 feet on each side of the water line crossing. The Owner will arrange for examining and correcting any defects in the existing lines.

When the water line must be below or less than two feet above the sewer line, encase the water line five feet in each direction from the crossing.

3.5 Tie-ins to Existing Pipelines

This work shall consist of connecting new water pipes to the existing system where shown on the plans and shall include the necessary fittings, tapping sleeves, valves and necessary equipment and material required to complete the connection.

Knowledge of pipe sizes in the existing system may not be accurate, therefore, it is recommended that the Contractor check outside diameters of existing pipe and types of pipe prior to ordering the required accessories. No additional payment will be allowed for machining pipe and/or accessories when the proper size is not ordered.

Neither the Owner nor the Engineer can guarantee the location of the existing lines. The Contractor shall verify the location of all existing water mains and valves pertaining to the proposed improvements before excavation is started.

Before shutting down an existing water main or branch main for a proposed connection, prior approval for a specific time and time interval shall be obtained from the Owner. At no time shall an existing main be shut without the Owner's knowledge and permission.

Excavation to existing water mains shall be carefully made, care being exercised not to damage the pipe. The excavation shall not be of excessive size or depth beneath the pipe. The sides of the excavation shall be as nearly vertical as possible.

The Contractor shall be responsible for any damage to the existing system and any such damage shall be repaired at the Contractor's expense.

3.6 Pipe Entering Structures

Cast iron, steel, or PVC pressure pipe, 4-inch diameter or larger, entering structure below original earth level, unsupported by original earth for a distance of more than six (6) feet, shall be supported by Class E concrete, where depth of such support does not exceed three (3) inches in accordance with the Standard Details. All other pressure pipe entering buildings or basins below original earth level, which have more than 3 feet span between wall and original earth and having a cover of more than 24 inches of earth, or under roadway, shall be supported as shown on Standard Detail drawings, in order to prevent breakage from settlement of backfill about the structure. Concrete and reinforcing steel for such supports are to be included in the unit price of work to which it is subsidiary, and not as extra concrete. Pipe entering structures shall have flexible joint within 16 inches of exterior of structure.

3.7 Backfilling

Begin backfilling as soon as practicable after pipe has been installed. Spade sand or earth around pipe as laying progresses to avoid danger of misalignment from slides, flooding or other causes. The Engineer shall be given a minimum of twenty four hours for inspection before backfilling.

The backfill shall be free from debris, organic material and stones, placed simultaneously on both sides of pipe to the same level by hand.

The backfilling of the lower part of the trench beginning at the top of the bedding, the backfill material shall be carefully and solidly tamped by hand or acceptable mechanical methods in six inch layers around the pipe and up to a point eight inches higher than the top of the pipe. For PVC only the backfill shall be select material and may be walked-in. Walking or working on the completed pipeline, except as necessary in tamping or backfilling, shall not be permitted until the trench has been backfilled to a point one diameter higher than the top of the pipe. The filling of the trench and the tamping of the backfill shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.

After the above specified backfill is hand placed, rock may be used in the backfill in pieces no larger than 18 inches in any dimension and to an extent not greater than one-half (1/2) the backfill materials used. Filling with rock and earth shall proceed simultaneously, in order that all voids between rocks may be filled with earth. Backfill material must be uniformly ridged over trench and excess hauled away, with no rock over 1-1/2 inch in diameter or pockets of crushed rock or gravel in top six inches of backfill. Confine backfill to the width of the trench and to the height sufficient for settlement of backfill. All rock, including crushed rock or gravel from construction, must be removed from yards and fields immediately following backfilling. Streets, roadways and walks shall be swept to remove all earth and loose rock immediately following backfilling.

In the case of street, highway, railroad, sidewalk and driveway crossings or within any roadway paving or about manholes, valve and meter boxes, the backfill must be machine tamped in not over 4-inch layers, measured loose in accordance with the Standard Details. Where backfill is under paved driveways, streets, highways, railroads, sidewalks, paved parking areas and other areas where settlement is not allowed, crushed stone or coarse sand backfill only shall be used up to the paving surface. Crushed stone shall be Kentucky Department of Highways Standards Specification No. 78 or finer. Tunnels shall be backfilled in not over 3-inch layers, measured loose, with selected material suitable for mechanically tamping. If material suitable for tamping cannot be obtained, sand, gravel or crushed rock (No. 78) shall be blown, packed or sluiced to completely fill all void spaces.

Coarse sand backfill shall be spread in layers not over four inches thick and thoroughly compacted. Sand may be moistened to aid compaction.

Any deficiency in the quantity of material for backfilling the trenches or for filling depressions caused by settlement, shall be supplied by the Contractor.

3.8 Pavement Replacement

Where conditions permit, pavement shall not be placed until 30 days have passed since placing backfill. Crushed stone as specified for roads and parking areas and sidewalks or their bases

shall be placed and compacted to the top of trench. Backfill shall be maintained easily passable to traffic at original ground level, until acceptance of project or replacement of paving or sidewalks.

3.9 Protection of Existing Structures

Protect all sewer, gas, electric, telephone, water and drain pipes or conduits, power and telephone poles and guy wires from danger of damage while pipelines are being constructed and backfilled, or from danger due to settlement of the backfill.

In case of damage to any such existing structures, repair and restoration shall be made at once and backfill shall not be replaced until this is done.

3.10 Hydrostatic Tests

The Contractor will be required to pressure test all pipelines and appurtenances with water at the pressure class of pipe installed. The pipe shall be slowly filled with water, care being taken to expel all air from the pipes. If necessary, the pipe shall be tapped at high points to vent the air. Pressure shall be applied for not less than four hours and all pipes, fittings, valves, hydrants and joints shall be carefully examined for defects or leakage. Any observed leakage shall be corrected.

Wherever practicable, corporations stops and service lines shall be installed before testing. If these items are installed after the main is tested, then a visual inspection of the tap and service line must be permitted while under pressure before backfilling service line.

The Contractor shall furnish a meter or suction tank, pipe test plugs and by-pass piping and make all connections for conducting the above tests. The pumping equipment used shall be centrifugal pump, or other pumping equipment which will not place shock pressures on the pipeline. Power plunger or positive displacement pumps will not be permitted for use on closed systems for any purpose.

The test shall be made between valves as far as practical in sections of pipe approximately 1,000 to 3,000 feet in length and shall, in general, be made within twelve working days of the completion of each section of line.

No pipe shall be accepted unless or until the leakage, determined by this test, is less than 5 U.S. gallons over 24 hours, per 1,000 feet, per inch nominal diameter of pipe.

Should there be leakage over the allowable amount, the Contractor will be required to locate and repair the leaks and retest the section. It is suggested, but not required, that the Contractor have a geophone (underground listening device) on the job at the time of testing.

If the leakage of the section of pipeline being tested is below the allowable amount, but leakage is obvious due to water at the surface of the ground, or by listening the leak can be heard

underground with a geophone, or any other means of determining a leak, the Contractor will be required to repair these leaks.

3.11 Disinfection

All water piping shall be thoroughly disinfected before being placed in service, by the use of chlorine or chlorine compounds in such amounts as to produce an initial concentration of at least 50 ppm and a residual of at least 25 ppm at the end of 24 hours, followed by thorough flushing. If for some reason, the initial disinfection fails to result in a 25 ppm residual, or the initial concentration does not achieve at least 50 ppm, the process shall be repeated until said 25 ppm residual is obtained after the 24 hour period. All disinfection shall be accomplished in a manner satisfactory to the Engineer and the Division of Water.

All valves in the lines including check and altitude valves shall be opened several times during the sterilization process.

3.12 Final Cleanup

Before completion of contract, all backfill shall be reshaped, holes filled and surplus material hauled away, and all permanent walks, street, driveway and highway paving, and sod, replaced and reseeding performed.

The Contractor shall be responsible for cleanup, grading, seeding, sodding or otherwise restoring all areas that he disturbs, even if these areas are within the work limits of other contractors on this project.

The work shall not be accepted until restoration is complete and all equipment, excess material and temporary structures have been removed.

End of Section

PART 1. GENERAL

1.1 Work Included

The Contractor shall furnish all material, labor and equipment required to install the force mains as shown on the plans and as specified herein.

1.2 Submittals

Submit manufacturer's specifications for materials and installation instructions. Include test reports showing compliance with project requirements where test method is indicated.

1.3 Delivery and Storage

Notify the Engineer when pipe will be received on the job so that proper arrangements may be made for inspecting the unloading operations and examining the pipe materials.

PART 2. PRODUCTS

2.1 Polyvinyl Chloride Pipe and Fittings

A. Pipe. PVC pipe shall meet ASTM Specifications D-1784 for material and D-2241 for pipe, latest revisions. Pipe shall also meet all applicable provisions of the Product Standards and shall bear the National Sanitation Foundation (NSF) seal of approval in compliance with NSF Standard No. 14. PVC pipe having a maximum hydrostatic working pressure of 160 psi (SDR26), 200 psi (SDR21), 250 psi (SDR17), or 315 psi (SDR13.5) shall be used as required.

The workmanship, pipe dimensions and tolerances, outside diameters, wall thickness, eccentricity, sustained pressures (ASTM D-1598), burst pressures (ASTM D-1599), flattening, extrusion quality (ASTM D-2152), marking and all other requirements of the Product Standard PS 22-70 shall be conformed with in all respects.

Pipe shall be furnished in 20 foot or 40 foot lengths. The pipe may be double plain end or with bell on one end. Male ends of pipe must be beveled on the outside. Pipe shall have a ring painted around the male end or ends in such a manner as to allow field checking of setting depth of pipe in the socket.

Pipe shall be joined with slip-type joints with rubber gaskets. Pipes with bells shall have all part of the bell, including the gasket groove, made from the same extruded piece, integral with the pipe, and shall be thickened to meet standard dimension ratios of wall thickness to outside diameter. The gasket groove shall be constructed such that gasket rollout will not occur. Rubber gasket shall conform to ASTM 1869. Joint lubricant shall be of a type recommended by the

manufacturer for their pipe. Lubricant shall be water soluble, non-toxic and shall have no objectionable properties.

B. Fittings. Cast or ductile iron mechanical joint or push-on type fittings with appropriate adapters shall be used with PVC pipe. All such fittings shall be approved by the pipe manufacturer. Fittings shall comply with AWWA C-110 or C-111 and shall be manufactured for the size and pressure class of the line on which they are used. Use of transition gaskets will not be allowed unless specifically approved by the pipe manufacturer.

2.2 Ductile Iron Sewer Pipe

Ductile iron sewer pipe installed underground shall be Class 50, tar coated outside and inside in accordance with AWWA specifications. The joints for ductile iron sewer pipes shall be of the push-on type and shall have an annular recess in the pipe to accommodate a single rubber gasket. Plain spigot ends shall be suitably beveled to permit easy entry into the bell. A gasket and annular recess of the socket shall be so designed and shaped that the gasket is located in place against displacement as the joint is assembled.

2.3 Polyethylene Plastic Pipe

Pipe and fittings shall meet or exceed all of the requirements for Type III C5-P34 as tabulated in ASTM D-1248, latest revision (Ultra High Molecular Weight High Density Polyethylene Pipe). All pipe shall be a minimum of schedule 40 if used for force main or as specifically noted on the plans. The pipe and fittings shall be pressure rated at 73.4° F and have a suggested design hoop stress of 730 psi.

All pipe shall be virgin quality, have a melt flow (Condition F) of less than 5.9 gms/10 min. (ASTM D1238) and shall exceed 1,000 hours on Environmental Stress Crack Resistance (ASTM D1693 Condition C.)

The polyethylene pipe shall have a manufacturer's recommended hydrostatic design stress rating of 730 psi based on a material with a 1,460 psi design basis determined in accordance with ASTM D-2837, Standard Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials.

Pipe shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, or other injurious defects. It shall be uniform in color, opacity, density and other physical properties.

Marking on the pipe shall include the nominal pipe size, the type of plastic material, the standard thermoplastic pipe pressure rating in psi at 73°F for low pressure 100 and 150 psi pipe (schedule 40 pipe is marked as such) and manufacturer's name or trade mark and code, at intervals of not more than five feet.

Molded fittings shall be molded from high density polyethylene of same material as main line.

Fabricated fittings shall be prepared from polyethylene pipe of same material as main line and by means of thermal fusion.

Polyethylene pipe lengths, fittings and flanged connections to be fused shall be of the same type, grade and class of polyethylene compound.

2.4 Plug Valves

Valves shall comply with AWWA C504 and C507. Valve body shall be stainless steel. Plugs shall be resilient faced with neoprene, suitable for use with sewage. Bearings shall be stainless steel. Valves shall be furnished with bell, flanged or mechanical joint end connections suitable for connection to the pipe with which they are to be used. Valves shall be DeZurik or approved equal.

2.5 Sewage Air Release Valves

Sewage air release valves shall be of the type that automatically releases air, gas or vapor under pressure during operation. Valves shall be 2" ARI model D-025 with reinforced nylon body, or approved equal.

2.6 Valve Boxes

All valves (plug, air release, check, etc.) installed underground shall be installed in a vertical position in an approved valve box.

Plug valve boxes shall be of a cast iron, two or three-piece, slip-type consisting of a base, a center section and a top section with a cover marked "SEWER". Where valve box is constructed in a paved area, the box shall be a screw type box. The entire assembly shall be adjustable for elevation and shall be set vertically and be properly adjusted so that the cover will be flush with the finished grade.

Air release valves will be installed in the same type of box as is used for meters. As described in these specifications the box may be cast iron, concrete, or concrete pipe. The box must allow for adequate cover over the pipe at the installation.

Check valves installed underground will be installed in the meter box type installation using concrete pipe and a meter box cover. The installation will utilize a suitable pipe diameter to accommodate the valve and accessories in accordance with the standard details. The box must allow for adequate cover over the pipe at the installation.

PART 3. EXECUTION

3.1 Clearing

Clearing and grubbing includes the cutting and removal of trees, stumps, brush, roots, logs, fences and other loose or projecting material and natural obstructions which must be removed to properly prosecute the construction and operate the facilities upon completion of construction. Protect trees, ornamental shrubs, plantings, fences, walls, and other improvements from the construction activity.

3.2 Trenching

Open the trench far enough ahead to reveal any obstruction that may necessitate changing the line or grade of the pipe.

Trench shall provide six inches of clearance on each side and below all pipe and fittings to provide working space and to permit proper backfilling around the pipe.

3.3 Shoring, Sheeting and Bracing of Excavation

Where unstable material is encountered, or where the depth of the excavation in earth exceeds five feet, support the sides of the trench or excavation by sheeting, bracing, or shoring. The design and installation of all sheeting, sheet piling, bracing or shoring shall be based on computations of pressure exerted by the materials to be retained. Proper shoring of excavations will be the responsibility of the Contractor. The Standards of the Federal Occupational Safety and Health Act and the Kentucky Department of Labor shall be followed.

3.4 Removal of Water

Provide adequate removal of all water and the prevention of surface water from entering the excavation. Maintain dry conditions within the excavations until the backfill is placed. All water pumped or drained from the excavation shall be disposed of in a suitable manner without damage to adjacent property or to other work under construction.

3.5 Bedding of Pipe

Prepare the bedding so that the entire load of the backfill on top of the pipe will be carried uniformly on the barrel of the pipe.

Trench bottoms shall be smooth and free of frozen material, dirt clods and stones over 1/2" diameter. A layer of soft backfill must be provided to ensure the pipe barrel is properly cushioned. Crushed stone, fine gravel, sand or compacted finely graded select earth shall be used to correct irregularities in the subgrade. Holes shall be excavated to prevent the bells from being supported on undisturbed earth.

If unstable material is encountered which may not provide a suitable foundation for the pipe, the unstable material will be removed and an adequate layer of encasement concrete or other special bedding shall be placed for the pipe foundation. Such "special pipe foundation" shall only be installed when directed by the Engineer in writing or on the plans.

3.6 Pavement Removal

Only one-half (1/2) of the street crossings or road crossings shall be excavated before placing temporary bridges over the side excavated, for the convenience of the traveling public. All backfilled ditches shall be maintained in such a manner that they will offer no hazard to the passage of traffic. The convenience of the traveling public and the property owners abutting the improvements shall be taken into consideration. All public or private drives shall be promptly backfilled or bridged. Pavement replacement shall be in accordance with these specifications.

3.7 Pipe Installation

All pipe must be tested for uniform diameter, straightness and defects. Pipe found defective, not meeting specifications, or improperly installed shall be rejected and replaced.

The interior of the pipe shall be cleaned of dirt, jointing materials, and other substances. When pipe installation is stopped for any reason, the exposed pipe end shall be closed to exclude earth and other material.

Joining of pipes and fittings shall be performed in accordance with the pipe manufacturer's recommendations as to equipment and technique.

No backfilling (except for securing pipe in place) over pipe will be allowed until the Engineer has had an opportunity to make an inspection of the joints and alignment. Such inspection shall not relieve the Contractor of further liability in case of defective joints.

No joints will be accepted that show leakage and if after backfilling and inspection any joints are found that are allowing ground water to enter the sewer, such joints must be dug up and corrected.

3.8 Thrust Blocking and Anchorage

All fittings, either vertical or horizontal, shall be braced or anchored against the tendency of movement with concrete thrust blocking, joint harness, or approved equivalent anchors to the satisfaction of the Engineer. Where joint harness is used, all component parts shall be stainless steel.

3.9 Water and Sewer Separation

Sewer lines must, if possible, be located a minimum lateral distance of 10 feet from existing water lines measured from outside diameters. Whenever this condition cannot be met, the sewer

line must be located at least two feet below and two feet to the side of the sewer line. Wherever sewer lines and water lines cross the sewer line must be at least 24 inches below the water line.

3.10 Pressure Testing

Prior to the final inspection, the Contractor shall have taken the necessary steps to remove all dirt, debris and obstructions from the interior of all lines. The finished lines shall be pressure tested and comply with the revisions listed herein, or similar requirements insuring equal or better results. Where leaks are visible or evident, the joints or pipes shall be remade and leakage minimized, regardless of total leakage as shown by test.

The force mains shall be tested at 100 PSI for 2 hours. The pumping equipment shall be detached during the test. An acceptable test shall be one in which the pressure holds during the test period as witnessed by the Engineer. Care shall be taken to ascertain that all air has been expelled from the lines prior to the test.

3.11 Final Cleanup

Before completion of contract, all backfill shall be reshaped, holes filled and surplus material hauled away, and all permanent walks, street, driveway and highway paving, and sod, replaced and reseeding performed.

The work shall not be accepted until the right-of-way of roads and all private property has been cleared of all rubbish and loose stone, and also all equipment, excess material and temporary structures. All property which has been damaged in the course of the work shall be restored in a manner fully acceptable to the property owner.

End of Section

N O T I C E

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS

NATIONWIDE PERMIT AUTHORIZATION

PROJECT: Powell County (KY 11), Item No. 10-1085.00 Replace Bridge & Approaches on KY 11 over Middle Fork Red River

The Section 404 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects". In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



DEPARTMENT OF THE ARMY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE KY 40201-0059
FAX: (502) 315-6677
http://www.irl.usace.army.mil/

August 30, 2013

Operations Division Regulatory Branch (South) ID No. LRL-2013-596

Mr. Ronald Rigney II Kentucky Transportation Cabinet 200 Mero Street Frankfort, Kentucky

Dear Mr. Rigney:

This is in response to your request for authorization to replace the KY-11 bridge and approaches, construct temporary traffic diversion and culvert replacement along the Middle Fork of the Red River and unnamed tributary near Slade in Powell County, Kentucky. The information supplied by you was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

Your project is considered a discharge of backfill or bedding material for a road crossing. The project is authorized under the provisions of 33 CFR 330 A Nationwide Permit (NWP) No. 14, Linear Transportation Projects, as published in the Federal Register February 21, 2012. Under the provisions of this authorization, you must comply with the enclosed Terms and General Conditions for Nationwide Permit No. 14.

You must also comply with the enclosed Water Quality Certification (WQC) Conditions for Nationwide Permit No. 14 dated March 19, 2012, issued by the Kentucky Division of Water. Once you obtain your certification, or if no application was required, you may proceed with the project without further contact or verification from us.

This decision is valid until March 18, 2017. The enclosed Compliance Certification should be signed and returned when the project is completed. If your project is not completed by this date or if your project is modified, you must contact us for another permit determination in accordance with the rules and regulations in effect at that time. Please note that we also perform periodic inspections to ensure compliance with our permit conditions and applicable Federal laws. A copy of this letter is being sent to the KDOW (see enclosure for address).

If you have any questions, please contact this office by writing to the above address, ATTN: CELRL-OP-FS, or by calling me at 502-315-6683. All correspondence pertaining to this matter should refer to our ID No. LRL-2013-596.

Sincerely,

Todd E. Hagman

Biologist

South Section

Regulatory Branch

Enclosures

Terms for Nationwide Permit No. 14 Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

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of Engineers. Louisville District **US Army Corps**

Nationwide Permit Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- navigation Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the US. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through
- made against the US on account of any such removal or alteration. structural work or obstructions caused thereby, without expense to the US. No claim shall be be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the opinion of the Secretary of the Army or his authorized representative, said structure or work shall the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will (c) The permittee understands and agrees that, if future operations by the US require
- culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the species that normally migrate through the area, unless the activity's primary purpose is to movement of those aquatic species impound water. All permanent and temporary crossings of waterbodies shall be suitably cycle movements of those species of aquatic life indigenous to the waterbody, including those Aquatic Life Movements. No activity may substantially disrupt the necessary life
- avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important 3. Spawning Areas. Activities in spawning areas during spawning seasons must be
- areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the US that serve as breeding
- or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
 <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, car unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic
- supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization. 8. Adverse Effects From Impoundments. If the activity creates an impoundment of 7. Water Supply Intakes. No activity may occur in the proximity of a public water
- water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable Management of Water Flows. To the maximum extent practicable, the pre-
- each activity, including stream channelization and storm water management activities, except as (e.g., stream restoration or relocation activities). course, condition, capacity, and location of open waters if it benefits the aquatic environment must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction provided below. The activity must be constructed to withstand expected high flows. The activity construction course, condition, capacity, and location of open waters must be maintained for
- approved state or local floodplain management requirements. 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA
- mats, or other measures must be taken to minimize soil disturbance. Equipment. Heavy equipment working in wetlands or mudflats must be placed on
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high

- encouraged to perform work within waters of the US during periods of low-flow or no-flow. tide line, must be permanently stabilized at the earliest practicable date. Permittees are
- revegetated, as appropriate. 13. <u>Removal of Temporary Fills</u>. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be
- including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained
- The same NWP cannot be used more than once for the same single and complete project. 15. Single and Complete Project. The activity must be a single and complete project.
- status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land and Scenic River System, or in a river officially designated by Congress as a "study river" for National Park Service, US Forest Service, US Fish and Wildlife Service). management agency responsible for the designated Wild and Scenic River or study river (e.g., possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild
- but not limited to, reserved water rights and treaty fishing and hunting rights. 17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including
- species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or completed. (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to
- compliance for the NWP activity, or whether additional ESA consultation is necessary engineer will review the documentation and determine whether it is sufficient to address ESA appropriate documentation to demonstrate compliance with those requirements. The district requirements of the ESA. Federal permittees must provide the district engineer with the (b) Federal agencies should follow their own procedures for complying with the
- back from the Corps within 45 days, the applicant must still wait for notification from Corps. or until Section 7 consultation has been completed. If the non-Federal applicant has not heard determination within 45 days of receipt of a complete PCN. In cases where the non-Federal that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed endangered or threatened species or designated critical habitat, the PCN must include the provided notification the proposed activities will have "no effect" on listed species or critical habitat applicant has identified listed species or critical habitat that might be affected or is in the vicinity of species and designated critical habitat and will notify the non-Federal applicant of the Corpsi name(s) of the endangered or threatened species that might be affected by the proposed work or been satisfied and that the activity is authorized. For activities that might affect Federally-listed vicinity of the project, or if the project is located in designated critical habitat, and shall not begin (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the the project, and has so notified the Corps, the applicant shall not begin work until the Corps has work on the activity until notified by the district engineer that the requirements of the ESA have
- engineer may add species-specific regional endangered species conditions to the NWPs (d) As a result of formal or informal consultation with the USFWS or NMFS the district

- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at http://www.fws.gov/or http://www.fws.gov/pac_and.http://www.noaa.gov/fisheries.html_respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- potential to cause effects or that consultation under Section 106 of the NHPA is complete. shall not begin the activity until notified by the district engineer either that the activity has no activity may have the potential to cause effects and notified the Corps, the non-Federal applicant properties. Where the non-Federal applicant has identified historic properties on which the determine whether the proposed activity has the potential to cause an effect on the historic make a reasonable and good faith effort to carry out appropriate identification efforts, which may properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the engineer if the authorized activity may have the potential to cause effects to any historic and field survey. Based on the information submitted and these efforts, the district engineer shall include background research, consultation, oral history interviews, sample field investigation, requirements of Section 106 of the National Historic Preservation Act. The district engineer shall notifications, district engineers will comply with the current procedures for addressing the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the location of or potential for the presence of historic resources can be sought from the State activities, the pre-construction notification must state which historic properties may be affected National Register of Historic Places, including previously unidentified properties. For such the potential for the presence of historic properties. Assistance regarding information on the by the proposed work or include a vicinity map indicating the location of the historic properties or (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who,

- with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.
- previously unknown historic, cultural or archeological remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

 22. Designated Critical Resource Waters. Critical resource waters include, NOAA-
- managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38,
- (b) For NWFs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
 (d) For losses of streams or other open waters that require pre-construction
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aduatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NVP verification must clearly indicate the party or parties responsible for the implementation and performance of the Compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has

been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. <u>Water Quality.</u> Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in the property of the control of the con

26. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Date)	(Transferee)

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

- shall not begin the activity until either: requested information has been received by the district engineer. The prospective permittee of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the to make the PCN complete only once. However, if the prospective permittee does not provide all permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective early as possible. The district engineer must determine if the PCN is complete within 30 calenda the NWP, the prospective permittee must notify the district engineer by submitting a PCN as 31. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of
- under the NWP with any special conditions imposed by the district or division engineer; or (1) He or she is notified in writing by the district engineer that the activity may proceed
- activity requires a written waiver to exceed specified limits of an NWP, the permittee may not 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic effects" on historic properties, or that any consultation required under Section 7 of the cause effects to historic properties, the permittee cannot begin the activity until receiving written suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

 (b) Contents of Pre-Construction Notification: The PCN must be in writing and include been obtained. Subsequently, the permittee's right to proceed under the NVVP may be modified, receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has begin the activity until the district engineer issues the waiver. If the district or division engineer notification from the Corps that there is "no effect" on listed species or "no potential to cause or to notify the Corps pursuant to general condition 20 that the activity may have the potential to condition 18 that listed species or critical habitat might be affected or in the vicinity of the project engineer. However, if the permittee was required to notify the Corps pursuant to general PCN and the prospective permittee has not received written notice from the district or division notifies the permittee in writing that an individual permit is required within 45 calendar days of (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information:
- Name, address and telephone numbers of the prospective permittee;
- description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed complies with the terms of the NWP. (Sketches usually clarify the project and when provided permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to appropriate unit of measure; any other NWP(s), regional general permit(s), or individual adverse environmental effects the project would cause, including the anticipated amount of loss engineering plans); results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative compensatory mitigation. Sketches should be provided when necessary to show that the activity determine that the adverse effects of the project will be minimal and to determine the need for of water of the US expected to result from the NWP activity, in acres, linear feet, or other (2) Location of the proposed project; the project's purpose; direct and indirect (3) A description of the proposed project; the project's purpose; direct and indirect
- especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation, project site. Wetland delineations must be prepared in accordance with the current method waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites (4) The PCN must include a delineation of wetlands, other special aquatic sites, and
- mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and and a PCN is required, the prospective permittee must submit a statement describing how the permittee may submit a conceptual or detailed mitigation plan. why compensatory mitigation should not be required. As an alternative, the prospective (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands

- proposed work. Federal applicants must provide documentation demonstrating compliance with of the project, or if the project is located in designated critical habitat, for non-Federal applicants affected by the proposed work or utilize the designated critical habitat that may be affected by the the PCN must include the name(s) of those endangered or threatened species that might be the Endangered Species Act; and (6) If any listed species or designated critical habitat might be affected or is in the vicinity
- Federal applicants the PCN must state which historic property may be affected by the proposed Preservation Act. must provide documentation demonstrating compliance with Section 106 of the National Historic work or include a vicinity map indicating the location of the historic property. Federal applicants for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-(7) For an activity that may affect a historic property listed on, determined to be eligible
- condition. A letter containing the required information may also be used. and must include all of the information required in paragraphs (b)(1) through (7) of this general ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN (c) Form of PCN Notification: The standard individual permit application form (Form
- effects to a minimal level. conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental Federal and state agencies concerning the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- each PCN notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases as provided below. The district engineer will indicate in the administrative record associated with activity are minimal. The district engineer will provide no response to the resource agency, except site-specific comments. The comments must explain why the agency believes the adverse effects 33 CFR 330.5. 37 authorization should be modified, suspended, or revoked in accordance with the procedures at where there is an unacceptable hazard to life or a significant loss of property or economic hardship to ensure the net adverse environmental effects to the aquatic environment of the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation consider agency comments received within the specified time frame concerning the proposed will be more than minimal. If so contacted by an agency, the district engineer will wait an additional transmitted to telephone or fax the district engineer notice that they intend to provide substantive, exception of NWP 37, these agencies will have 10 calendar days from the date the material is engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that will occur. The district engineer will consider any comments received to decide whether the NWP 15 calendar days before making a decision on the PCN notification. The district engineer will fully (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (2) For all NWP activities that require PCN notification and result in the loss of greater
- Stevens Fishery Conservation and Management Act. Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (3) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP District Engineers have authority to determine if an activity complies with the terms
- approvals, or authorizations required by law. 2. NWPs do not obviate the need to obtain other federal, state, or local permits
- NWPs do not grant any property rights or exclusive privileges.
- NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project.

ADDRESS FOR COORDINATING AGENCY

Ms. Sandra Gruzesky
Director
Kentucky Energy and Environment Cabinet
Division of Water
200 Fair Oaks, 4th Floor
Frankfort, Kentucky 40601

Compliance Certification:

Permit Number: LRL-2013-596

Name of Permittee: Kentucky Transportation Cabinet

Date of Issuance: August 30, 2013

Upon completion of the activity authorized by this permit and any mitigation required by this permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers CELRL-OP-FS P.O. Box 59 Louisville, Kentucky 40201

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee	Date



Kentucky Transportation Cabinet Highway District 10

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_____(2), Construction

Kentucky Pollutant Discharge Elimination System Permit KYR10 Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

[BRIDGE REPLACEMENT ON KY 11 OVER MIDDLE FORK OF RED RIVER](1)

Project: 10 - 1085

Project information

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Note -(1) = Design (2) = Construction (3) = Contractor
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- 1. Owner Kentucky Transportation Cabinet, District _10_ (1)
- 2. Resident Engineer: (2)
- 3. Contractor name: (2)

Address: (2)

Phone number: (2)

Contact: (2)

Contractors agent responsible for compliance with the KPDES permit requirements (3):

- 4. Project Control Number (2)
- 5. Route (Address) STANTON TO SLADE ROAD (KY 11) (1)
- 6. Latitude/Longitude (project mid-point) 37°48'13", 83°42'33" (1)
- 7. County (project mid-point) (1) POWELL COUNTY
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

A. Site description:

- Nature of Construction Activity (from letting project description) (1) BLASTING, ROCK EXCAVATION, ROCK FALL MIGITATION
- 2. Order of major soil disturbing activities (2) and (3)
- Projected volume of material to be moved (1)
 1628 CU. YDS

- 4. Estimate of total project area (acres) (1)
 - 1.5 ACRES
- 5. Estimate of area to be disturbed (acres) (1)
 - 1 ACRE
- 6. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
- 7. Data describing existing soil condition (1) & (2)
- 8. Data describing existing discharge water quality (if any) (1) & (2)
- Receiving water name (1)MIDDLE FORK OF RED RIVER
- 10. TMDLs and Pollutants of Concern in Receiving Waters: (1 DEA)
- 11. Site map Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
- 12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

 Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and

the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

- 2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
- 3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - ➤ Construction Access This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - Clearing and Grubbing The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved

- Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
- Brush and/or other barriers to slow and/or divert runoff.
- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- ➤ Finish Work (Paving, Seeding, Protect, etc.) A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection
 - Placing Sod
 - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water

discharges that will occur after construction has been completed are: (1)

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.

2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the iob
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure

- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

Hazardous Products:

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

Petroleum Products:

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

> Fertilizers:

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will

be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

> Paints:

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

Concrete Truck Washout:

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

> Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. (1)

E. Maintenance

- The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
- Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. (1)

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- ➤ Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- Inspection reports will be written, signed, dated, and kept on file.

- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- ➤ All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- ➤ Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- ➤ Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- ➤ Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

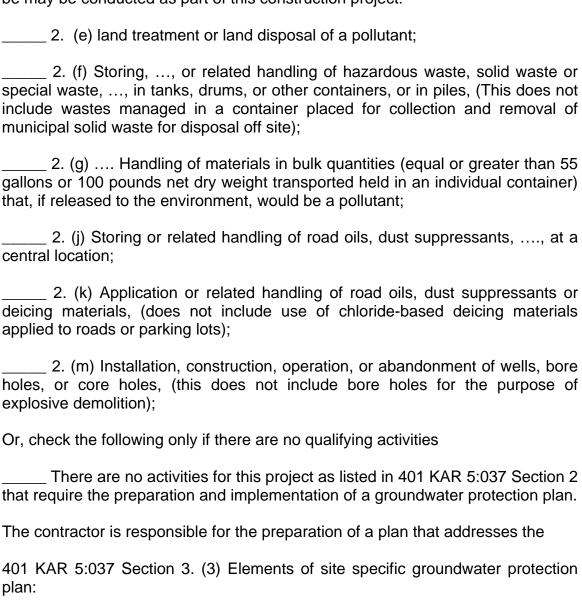
All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:



information:

(a) General information about this project is covered in the Project

- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer sig	nature		
Signed Typed or printed	title d name ²	signature	
(3) Signed	title		
Typed or printed	name ¹	signature	

- 1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.
- 2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

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KyTC BMP Plan for Project PCN ## -

Sub-Contractor Certification

Subcontractor

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

	Name: Address: Address:				
	Phone:				
The pa	rt of BMP plan this subo	contractor is responsi	ble to implem	nent is:	
Kentuc dischar dischar	y under penalty of law ky Pollutant Discharge ges, the BMP plan that ged as a result of storn ement of non-storm wa	Elimination System p t has been developed m events associated	ermit that au to manage t with the cons	thorizes the storm vibe quality of water the truction site activity	vater o be and
Signed	Typed or printed name	title e ¹	,	signature	

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

POWELL COUNTY STP **SY (P \$2**50**2**035)

11 JUL 2013

KENTUCKY TRANSPORTATION CABINET COMMUNICATING ALL PROMISES (CAP) ACTIVE

Page: Cdntract ID: 131076 Page 71 of 128

<u>Item No.</u> 10 - 1085 <u>Project Mgr.</u> kytc\min.jiang

County POWELL Route KY-11

<u>CAP # Date of Promise Promise made to:</u> <u>Location of Promise</u>

1 11-JAN-13 USFWS Project Length

CAP Description

MITIGATIONS IN THE FORM OF IN-LIEU FEES, AS NOTED IN THE BIOLOGICAL ASSESSMENT DOCUMENT, HAVE BEEN ESTABLISHED FOR THIS PROJECT. NO SEASONAL RESTRICTIONS ON TREE CUTTINGS MANDATED BY USFWS WILL BE REQUIRED.

2 18-APR-13 District 10 ROW Section Left Station 57+20 & Right Station 57+20

CAP Description

PAVE ENTRANCES TO THE PROPERTY OF STEPHEN D.ROSE AS STATED IN THE MEMORANDUM OF UNDERSTANDING.

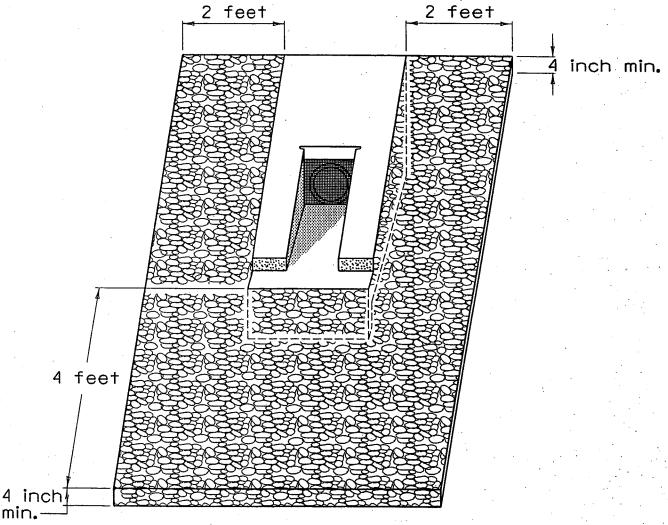
DETAIL SHEET FOR PAVEMENT SUBSURFACE DRAINAGE OUTLET

Use approximately one ton of Crushed Aggregate Size No. 2 at all Perforated Pipe Headwall Outlets as illustrated in the detail below. Place Crushed Aggregate Size No. 2 to a minimum depth of 4" as detailed below.

Use Dense Graded Aggregate (DGA) removed during placement of the Crushed Aggreagate Size No. 2 to dress existing shoulders where DGA is exposed. Waste other materials removed during placement of the Crushed Aggregate Size No. 2 as directed by the Engineer. The Department will make no direct payment for disposal of wasted material.

The Department will consider payment for Crushed Aggregate Size No. 2 as full compensation for all materials, labor, and other incidentals necessary to place Crushed Aggregate Size No. 2 for vegetation control and/or erosion control at pavement edge drain outlets.

See current Standard Drawing RDP-010 for dimensions and other details.



PERFORATED PIPE HEADWALL OUTLET

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

Revision: Replace 8) Staking with the following: 8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky. Subsection: Revision: Revis		
8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky. Subsection: Revision: Revise item Crushed Aggregate Used for Embankment Stabilization to the following: Crushed Aggregate Used for Stabilization of Unsuitable Materials Used for Stabilization. Revision: Revision: Replace the first part of the first sentence of the second paragraph with the following: Perform all work and operations necessary to accomplish final clean-up as specified in the first paragraph of Subsection 105.12; Revision: Revis	Subsection:	108.03 Preconstruction Conference.
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Subsection: 208.02.01 Cement.		
Revision: Replace paragraph with the following:	Subsection:	
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Select Type I or Type II cement conforming to Section 801. Use the same type cement		1
throughout the work.		throughout the work.

Subsection:	208.03.06 Curing and Protection.				
Revision:	Replace the fourth paragraph with the following:				
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day consists of a continuous 24-hour period in which the ambient air temperature does not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7), 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department may allow a shortened curing period when the Contractor requests. The Contractor shall give the Department at least 3 day notice of the request for a shortened curing period. The Department will require a minimum of 3 curing days after final compaction. The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened curing time is requested. The Department will test cores using an unconfined compression test. Roadbed cores must achieve a minimum strength requirement of 80 psi.				
Subsection:	208.03.06 Curing and Protection.				
Revision:	Replace paragraph nine with the following:				
	At no expense to the Department, repair any damage to the subgrade caused by freezing.				
Subsection:	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Number:	2)				
Revision:	Replace the paragraph with the following:				
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed				
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course				
	replace the crown vetch with Kentucky 31 Tall Fescue.				
Subsection:	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Number:	3)				
Revision:	Replace the paragraph with the following:				
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and				
	12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent				
	to crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.				
Subsection:	213.03.02 Progress Requirements.				
Revision:	Replace the last sentence of the third paragraph with the following:				
	Additionally, the Department will apply a penalty equal to the liquidated damages when all				
	aspects of the work are not coordinated in an acceptable manner within 7 calendar days after				
	written notification.				
Subsection:	213.03.05 Temporary Control Measures.				
Part:	E) Temporary Seeding and Protection.				
Revision:	Delete the second sentence of the first paragraph.				
Subsection:	304.02.01 Physical Properties.				
Table:	Required Geogrid Properties				
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.				

Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	3) Sampling.					
Revision:	Replace the second sentence with the following: The Department will determine when to obtain the quality control samples using the random-number feature of the mix design submittal and approval spreadsheet. The Department will randomly determine when to obtain the verification approval in Subspace 102 02 02 and 102 03 04 using the Application of the Minture Sample.					
	samples required in Subsections 402.03.03 and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	3) VMA.					
Revision:	Add the following paragraph below Number 3) VMA: Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 working days for mixture verification testing by the					
	Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens from the affected sublot(s) for the duration of the project.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	4) Density.					
Revision:	Replace the second sentence of the Option A paragraph with the following: Perform coring by					
	the end of the following work day.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	5) Gradation.					
Revision:	Delete the second paragraph.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	H) Unsatisfactory Work.					
Number:	1) Based on Lab Data.					
Revision:	Replace the second paragraph with the following: When the Engineer determines that safety					
	concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.					

Subsection:	402.03.03 Verification.
Revision:	Replace the first paragraph with the following:
	402.03.03 Mixture Verification. For volumetric properties, the Department will perform a
	minimum of one verification test for AC, AV, and VMA according to the corresponding
	procedures as given in Subsection 402.03.02. The Department will randomly determine when
	to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage
	Generator. For specialty mixtures, the Department will perform one AC and one gradation
	determination per lot according to the corresponding procedures as given in Subsection
	402.03.02. However, Department personnel will not perform AC determinations according to
	KM 64-405. The Contractor will obtain a quality control sample at the same time the
	Department obtains the mixture verification sample and perform testing according to the
	procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified
	by the Department's test results within the tolerances provided below, the Contractor's sample
	will serve as the quality control sample for the affected sublot. The Department may perform
	the mixture verification test on the Contractor's equipment or on the Department's equipment.
Subsection:	402.03.03 Verification.
Part:	A) Evaluation of Sublot(s) Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following: When the paired t -test
ite vision.	indicates that the Contractor's data and Department's data are possibly not from the same
	population, the Department will investigate the cause for the difference according to Subsection
	402.03.05 and implement corrective measures as the Engineer deems appropriate.
	The second secon
Subsection:	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the first paragraph with the following: When differences between
	test results are not within the tolerances listed below, the Department will resolve the
	discrepancy according to Subsection 402.03.05.
Subsection:	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following: When the F -test or t -
	test indicates that the Contractor's data and Department's data are possibly not from the same
	population, the Department will investigate the cause for the difference according to Subsection
	402.03.05 and implement corrective measures as the Engineer deems appropriate.
Subsection:	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following: When patterns indicate substantial differences
	between the verified and non-verified sublots, the Department will perform further comparative
	testing according to subsection 402.03.05.

Subsection:	402.03 CONSTRUCTION.							
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.							
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the							
	Department will obtain an additional verification sample at random using the Asphalt Mixture							
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and							
	Department's laboratory testing equipment and technicians. The Department will obtain a							
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split							
	it according to AASHTO R 47. The Department will retain one split portion of the sample and							
	provide the other portion to the Contractor. At a later time convenient to both parties, the							
	Department and Contractor will simultaneously reheat the sample to the specified compaction							
	temperature and test the mixture for AV and VMA using separate laboratory equipment							
	according to the corresponding procedures given in Subsection 402.03.02. The Department							
	will evaluate the differences in test results between the two laboratories. When the difference							
	between the results for AV or VMA is not within \pm 2.0 percent, the Department will investigate							
	and resolve the discrepancy according to Subsection 402.03.05.							
Subsection:	402.03.04 Dispute Resolution.							
Revision:	Change the subsection number to 402.03.05.							
Subsection:	402.05 PAYMENT.							
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures							
Table:	AC							
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.							
Subsection:	403.02.10 Material Transfer Vehicle (MTV).							
Revision:	Replace the first sentence with the following: In addition to the equipment specified above,							
	provide a MTV with the following minimum characteristics:							
Subsection:	412.02.09 Material Transfer Vehicle (MTV).							
Revision:	Replace the paragraph with the following:							
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.							
Subsection:	412.03.07 Placement and Compaction.							
Revision:	Replace the first paragraph with the following:							
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on							
	ramps and/or shoulders unless specified in the contract. When the Engineer determines the use							
	of the MTV is not practical for a portion of the project, the Engineer may waive its requirement							
	for that portion of pavement by a letter documenting the waiver.							
Subsection:	412.04 MEASUREMENT.							
Revision:	Add the following subsection:							
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for							
	payment and will consider its use incidental to the asphalt mixture.							

Subsection:	501.03.19 Surface Tolerances and Testing Surface.			
Part:	B) Ride Quality.			
Revision:	Add the following to the end of the first paragraph:			
	The Department will specify if the ride quality requirements are Category A or Category B			
	when ride quality is specified in the Contract. Category B ride quality requirements shall apply			
	when the Department fails to classify which ride quality requirement will apply to the Contract.			
Subsection:	603.03.06 Cofferdams.			
Revision:	Replace the seventh sentence of paragraph one with the following:			
Te vision.	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of			
	Kentucky.			
Subsection:	605.03.04 Tack Welding.			
Revision:	Insert the subsection and the following: 605.03.04 Tack Welding. The Department does not			
Te vision.	allow tack welding.			
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.			
Part:	A) Existing Bridges and New Structures.			
Number:	1) Prewetting and Grout-Bond Coat.			
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge			
	decks prepared by hydrodemolition.			
Subsection:	609.03 Construction.			
Revision:	Replace Subsection 609.03.01 with the following:			
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast			
	concrete release the temporary erection supports under the bridge and swing the span free on its			
	supports.			
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the			
	beam is placed in the final location and prior to placing steel reinforcement. At locations where			
	lift loops are cut, paint the top of the beam with galvanized or epoxy paint.			
Subsection:	611.03.02 Precast Unit Construction.			
Revision:	Replace the first sentence of the subsection with the following: Construct			
	units according to ASTM C1577, replacing Table 1 (Design Requirements for Precast			
	Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with KY			
	Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the following			
	exceptions and additions:			
Subsection:	613.03.01 Design.			
Number:	2)			
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD			
	Bridge Design Specifications"			
Subsection:	615.06.02			
Revision:	Add the following sentence to the end of the subsection. The ends of units shall be normal to			
	walls and centerline except exposed edges shall be beveled ¾ inch.			
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.			
Revision:	Replace the reference of 6.6 in the section to 615.06.06.			
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.			
Revision:	Replace the reference of 6.7 in the section to 615.06.07.			

Subsection:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Subsection: Revision:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units. Replace the subsection with the following: Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be not more than 16 inches.
	615.06.07 Laps, Welds, and Spacing for Precast Endwalls. Replace the subsection with the following: Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.
Revision:	Replace the subsection with the following: Start-up slump, air content, unit weight, and temperature tests will be performed each day on the first batch of concrete. Acceptable start-up results are required for production of the first unit. After the first unit has been established, random acceptance testing is performed daily for each 50 yd³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature tests, a minimum of one set of cylinders shall be required each time plastic property testing is performed.
Subsection:	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection:	615.08.04 Acceptability of Core Tests. Delete the entire subsection.
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Subsection: Revision:	615.12 Inspection.
Mevision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the "Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting
	from transport to the jobsite.
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Replace sentence with the following: Conform to Section 821. 716.03 CONSTRUCTION. Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims, 716.03.02 Lighting Standard Installation. Revision: Replace the second sentence with the following: Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum of four feet from the front face of the guardrail to the front face of the pole base. 716.03.02 Lighting Standard Installation. A) Conventional Installation. Replace the third sentence with the following: Orient the transformer base so the door is positioned on the side away from on-coming traffic. Subsection: 716.03.02 Lighting Standard Installation. A) Conventional Installation and Requirements. Replace the first sentence with the following: For breakaway supports, conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims. Subsection: 716.03.02 Lighting Standard Installation. Part: B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. Totoscetion: 716.03.02 Lighting Standard Installation.	Subsection:	716 0	2 02 Pair	nt							
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Vertical Bars Ties or Spiral Size Spacing or Pitch						7 ft	20 ft	7 ft	(1)	7 ft]
Size Total Size Spacing or Pitch			<u> </u>								
Size Total Size Pitch											
#10 16 #4 12 inch											
			#10	16		#4	12 in	ch	-		

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used.

Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection:

716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

Revision:

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

Subsection:

716.03.03 Trenching.

Part:

B) Trenching of Conduit for Non-Highmast Cables.

Revision:

Add the following after the second sentence: If depths greater than 24 inches are necessary for either situation listed previously, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

Subsection:

716.03.10 Junction Boxes.

Revision:

Replace subsection title with the following: Electrical Junction Box.

Subsection:	716.04.07 Pole with Secondary Control Equipment.					
Revision:	Replace the paragraph with the following:					
	The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, or electrical inspection fees, and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, and ground wires and will consider them incidental to this item of work.					
Subsection:	716.04.08 Lighting Control Equipment.					
Revision:	Replace the paragraph with the following:					
	The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure constructing the concrete base, excavation, backfilling, restoration, any necessary anchors, or electrical inspection fees, and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, and ground wires and will consider them incidental to this item of work.					
Subsection:	716.04.09 Luminaire.					
Revision:	Replace the first sentence with the following:					
	The Department will measure the quantity as each individual unit furnished and installed.					
Subsection:	716.04.10 Fused Connector Kits.					
Revision:	Replace the first sentence with the following:					
	The Department will measure the quantity as each individual unit furnished and installed.					
Subsection:	716.04.13 Junction Box.					
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.					
Subsection:	716.04.13 Junction Box.					
Part:	A) Junction Electrical.					
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.					
Subsection:	716.04.14 Trenching and Backfilling.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to					
	original condition, and will consider them incidental to this item of work.					
Subsection:	716.04.18 Remove Lighting.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump					
	sum for the removal of lighting equipment. The Department will not measure the disposal of					
	all equipment and materials off the project by the contractor. The Department also will not					
	measure the transportation of the materials and will consider them incidental to this item of					
	work.					

Subsection:	716.04.20 Bore and Jack Conduit.							
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear							
	feet. This item shall include all work necessary for boring and installing conduit under an							
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,							
	paragraphs 1, 2, and 4.							
Subsection:	716.05 PAYMENT.							
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>							
	<u>Unit</u> with the following:							
	<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>							
	04810 Electrical Junction Box Each							
	04811 Electrical Junction Box Type B Each							
	20391NS835 Electrical Junction Box Type A Each							
	20391NS835 Electrical Junction Box Type C Each							
Subsection:	723.03 CONSTRUCTION.							
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural							
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current							
	nterims,							
Subsection:	723.02.02 Paint.							
Revision:	Replace sentence with the following: Conform to Section 821.							
Subsection:	723.03.02 Poles and Bases Installation.							
Revision:	Replace the first sentence with the following:							
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a							
	minimum of four feet from the front face of the guardrail to the front face of the pole base.							
Subsection:	723.03.02 Poles and Bases Installation.							
Part:	A) Steel Strain and Mastarm Poles Installation							
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section							
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions							
	encountered during drilling and slope condition at the site. Refer to the design chart below:							
Subsection:	723.03.02 Poles and Bases Installation.							
Part:	B) Pedestal or Pedestal Post Installation.							
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports,							
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for							
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.							
Subsection:	723.03.03 Trenching.							
Part:	A) Under Roadway.							
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,							
	obtain the Engineer's approval and maintain ether required conduit depths coming into the							
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.							

loop wire and lead-in past the installed conduit in poles, pedestals, and				
	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of			
	d junction boxes.			
Subsection: 723.03.12 Loop Installation.				
Revision: Replace the fifth sentence with the following: Provide an extra two fee	et of loop wire and lead-			
in past the installed conduit in poles, pedestals, and junction boxes.				
Subsection: 723.04.02 Junction Box.				
Revision: Replace subsection title with the following: Electrical Junction Box T	Replace subsection title with the following: Electrical Junction Box Type.			
Subsection: 723.04.03 Trenching and Backfilling.				
Revision: Replace the second sentence with the following: The Department will	not measure excavation,			
backfilling, underground utility warning tape (if required), the restorat	ion of disturbed areas to			
original condition, and will consider them incidental to this item of wo	ork.			
Subsection: 723.04.10 Signal Pedestal.				
Revision: Replace the second sentence with the following: The Department will	not measure excavation,			
concrete, reinforcing steel, specified conduits, fittings, ground rod, gro	ound wire, backfilling,			
restoring disturbed areas, or other necessary hardware and will consider	er them incidental to this			
item of work.				
Subsection: 723.04.15 Loop Saw Slot and Fill.				
Revision: Replace the second sentence with the following: The Department will	not measure sawing,			
cleaning and filling induction loop saw slot, loop sealant, backer rod, a	and grout and will			
consider them incidental to this item of work.				
Subsection: 723.04.16 Pedestrian Detector.				
Revision: Replace the paragraph with the following: The Department will measure	are the quantity as each			
individual unit furnished, installed and connected to pole/pedestal. The	ne Department will not			
measure installing R10-3e (with arrow) sign, furnishing and installing	mounting hardware for			
sign and will consider them incidental to this item of work.				
Subsection: 723.04.18 Signal Controller- Type 170.				
Revision: Replace the second sentence with the following: The Department will	not measure constructing			
the concrete base or mounting the cabinet to the pole, connecting the s	signal and detectors,			
excavation, backfilling, restoration, any necessary pole mounting hard	ware, electric service, or			
electrical inspection fees and will consider them incidental to this item	of work. The			
Department will also not measure furnishing and connecting the induc	ction of loop amplifiers,			
pedestrian isolators, load switches, model 400 modem card; furnishing	g and installing electrical			
service conductors, specified conduits, anchors, meter base, fused cuto	out, fuses, ground rods,			
ground wires and will consider them incidental to this item of work.				

Subsection:	723.04.20 Install Signal Controller - Type 170.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit installed. The Department will not measure constructing the concrete base or
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical
	inspection fees and will consider them incidental to this item of work. The Department will
	also not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches,
	model 400 modem card; furnishing and installing electrical service conductors, specified
	conduits, anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider
	them incidental to this item of work.
Subsection:	723.04.22 Remove Signal Equipment.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump
	sum removal of signal equipment. The Department will not measure the return of control
	equipment and signal heads to the Department of Highways as directed by the District Traffic
	Engineer. The Department also will not measure the transportation of materials of the disposal
	of all other equipment and materials off the project by the contractor and will consider them
G 1	incidental to this item of work.
Subsection:	723.04.28 Install Pedestrian Detector Audible.
Revision:	Replace the second sentence with the following: The Department will not measure installing sign R10-3e (with arrow) and will consider it incidental to this item of work.
Subsection:	723.04.29 Audible Pedestrian Detector.
Revision:	Replace the second sentence with the following: The Department will not measure furnishing
Kevision.	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.
Subsection:	723.04.30 Bore and Jack Conduit.
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear
	feet. This item shall include all work necessary for boring and installing conduit under an
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,
	paragraphs 1, 2, and 4.
Subsection:	723.04.31 Install Pedestrian Detector.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit installed and connected to pole/pedestal. The Department will not measure
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.
Subsection:	723.04.32 Install Mast Arm Pole.
Revision:	Replace the second sentence with the following: The Department will not measure arms, signal
151011.	mounting brackets, anchor bolts, or any other necessary hardware and will consider them
	incidental to this item of work.
Subsection:	723.04.33 Pedestal Post.
Revision:	Replace the second sentence with the following: The Department will not measure excavation,
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,
	restoration, or any other necessary hardware and will consider them incidental to this item of
	work.

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Subsection:	723.04.36 Traffic S	Signal Pole Base.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation, reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or restoration and will consider them incidental to this item of work.				
Subsection:	723.04.37 Install S	ignal Pedestal.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation, concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire, backfilling, restoration, or any other necessary hardware and will consider them incidental to this item of work.				
Subsection:	723.04.38 Install P				
Revision:	Replace the second sentence with the following: The Department will not measure excavation, concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire, backfilling, restoration, or any other necessary hardware and will consider them incidental to this item of work.				
Subsection:	723.05 PAYMENT	Γ.			
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay Unit</u> with the following:				
	Code P	Pay Item	<u>Pa</u>	ny Unit	
	04810 E	lectrical Junction Box		Each	
	04811 E	lectrical Junction Box Type I	3	Each	
	20391NS835 E	Electrical Junction Box Type A	1	Each	
		Electrical Junction Box Type (7	Each	
Subsection:	813.04 Gray Iron C	9			
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".				
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.				
Number:	A) Bolts.				
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Replace the first sentence of the fourth paragraph with the following:				
	Use any of the species of wood for round or square posts covered under AWPA U1.				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph 4.1".				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Delete the second sentence of the fourth paragraph.				
Subsection:	816.07.02 Wood Posts and Braces.				
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph 4.1".				
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Subsection:	816.07.02 Wood Posts and Braces.				
Revision:	Delete the second sentence of the first paragraph.				
Subsection:	818.07 Preservative Treatment.				
Revision:					
Subsection:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A". 834.14 LIGHTING POLES.				
Revision:					
Kevision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with				
	loading and allowable stress requirements of the AASHTO Standard Specifications for				
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
G 1 4					
Subsection:	834.14.03 High Mast Poles.				
Revision:	*Remove the second and fourth sentence from the first paragraph.				
	*Replace the third paragraph with the following: Provide calculations and drawings that are				
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.				
	*Replace paragraph six with the following: Provide a pole section that conforms to ASTM A				
	595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield				
	strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a				
	constant linear taper of .144 in/ft and contain only one longitudinal seam weld.				
	Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole				
	sections that are telescopically slip fit assembled in the field to facilitate inspection of interior				
	surface welds and the protective coating. The minimum length of the telescopic slip splices				
	shall be 1.5 times the inside diameter of the exposed end of the female section. Use				
	longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications.				
	The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally				
	welded to the tubes with a telescopic welded joint or a full penetration groove weld with				
	backup bar.				
	The handhole cover shall be removable from the handhole frame. One the frame side opposite				
	the hinge, provide a mechanism on the handhole cover/frame to place the Department's				
	standard padlock as specified in Section 834.25. The handhole frame shall have two stainless				
	studs installed opposite the hinge to secure the handhole cover to the frame which includes				
	providing stainless steel wing nuts and washers. The handhole cover shall be manufactured				
	from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is				
	permanently secured to the handhole frame to insure weather-tight protection. The hinge shall				
	be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit				
	for the cover. The minimum clear distance between the transverse plate and the				
	·				
	bottom opening of the handhole shall not be less than the diameter of the bottom tube of the				
	pole but needs to be at least 15 inches. The handhole frame width shall be 0.4 times the				
	diameter of the bottom tube.				
	Provide products that are hot-dip galvanized to the requirements of either ASTM A123				
	(fabricated products) or ASTM A 153 (hardware items).				
Subsection:	834 16 ANCHOD ROLTS				
	834.16 ANCHOR BOLTS.				
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRR Report 404 Section 2.4 and NCHRR 460 Appendix A Specifications				
	follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.				

Subsection:	834.17.01 Conventional.				
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on				
	the bottom of the housing that is legible from the ground and indicates the wattage of the				
	fixture by providing the fist to numbers of the wattage.				
Subsection:	834.21.01 Waterproof Enclosures.				
Revision:	*Add the following sentence in the second paragraph in the thirteenth sentence: Provide a				
	cabinet door with a louvered air vent, Filter-retaining brackets and an easy clean metal filter.				
	*Replace sentence sixteen with the following: Use a 120-volt fixture and utilize a compact				
	fluorescent or L.E.D. bulb (equivalent to 60 watt minimum).				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall				
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for				
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with				
	current interims.				
Subsection:	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plats				
	have a thickness ≥ 2 inches.				
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter				
	shall not be less than 16.25 inches.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the second sentence of the fifth paragraph with the following: For anchor bolt design,				
	pole forces shall be positioned in such a manner to maximize the force on any individual				
	anchor bolt regardless of the actual anchor bolt orientation with the pole.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the first and second sentence of the sixth paragraph with the following: The pole				
	handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable from the				
	handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole				
	cover/frame to place the Department's standard padlock as specified in Section 834.25. The				
	handhole frame shall have two stainless studs installed opposite the hinge to secure the				
	handhole cover to the frame which includes providing stainless steel wing nuts and washers.				
	The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153)				
	and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure				
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to				
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance				
	between the transverse plate and the bottom opening of the handhole shall not be less than the				
	diameter of the bottom tube but needs to be at least 12 inches.				
Subsection:	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway				
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				

Subsection:	835.07.01 Steel Strain Poles.					
Revision:	Replace the second sentence of the second paragraph with the following:					
	The detailed analysis shall be certified by a Professional Engineer licensed in the					
	Commonwealth of Kentucky.					
Subsection:	835.07.01 Steel Strain Poles.					
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations					
	should be shown for all fatigue related connections. Provide the corresponding detail, stress					
	category and example from table 11.9.3.1-1.					
Subsection:	835.07.02 Mast Arm Poles.					
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis					
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.					
Subsection:	835.07.02 Mast Arm Poles.					
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations					
	should be shown for all fatigue related connections. Provide the corresponding detail, stress					
	category and example from table 11.9.3.1-1.					
Subsection:	835.07.03 ANCHORS.					
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be					
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.					
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully					
	galvanized (ASTM A 153).					
Subsection:	835.16.05 Optical Units.					
Revision:	Replace the 3rd paragraph with the following:					
	The list of certified products can be found on the following website: http://www.intertek.com.					
Subsection:	835.19.01 Pedestrian Detector Body.					
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum					
	rectangular housing that is a compatible with the pedestrian detector.					

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SPECIAL PROVISION FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES

This Special Provision will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Construct a soil, granular, or rock embankment with granular or cohesive pile core and place structure granular backfill, as the Plans require. Construct the embankment according to the requirements of this Special Provision, the Plans, Standard Drawing RGX 100 and 105, and the 2012 Standard Specifications.

2.0 MATERIALS.

- **2.1 Granular Embankment.** Conform to Subsection 805.10. When Granular Embankment materials are erodible or unstable according to Subsection 805.03.04, use the Special Construction Methods found in 3.2 of the Special Provision.
- **2.2 Rock Embankment.** Provide durable rock from roadway excavation that consists principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.
- **2.3 Granular Pile Core.** Select a gradation of durable rock to facilitate pile driving that conforms to Subsection 805.11. If granular pile core material hinders pile driving operations, take appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.
- **2.4** Cohesive Pile Core. Conform to Section 206 of the Standard Specifications and use soil with at least 50 percent passing a No. 4 sieve having a minimum Plasticity Index (PI) of 10. In addition, keep the cohesive pile core free of boulders, larger than 6 inches in any dimension, or any other obstructions, which would interfere with drilling operations. If cohesive pile core material interferes with drilling operations, take appropriate means necessary to maintain excavation stability, at no expense to the Department.
 - 2.5 Structure Granular Backfill. Conform to Subsection 805.11
- **2.6 Geotextile Fabric.** Conform to Type I or Type IV in Section 214 and 843 as required in the plans.

3.0 CONSTRUCTION.

3.1 General. Construct roadway embankments at end bents according to Section 206 and in accordance with the Special Provision, the Plans, and Standard Drawings for the full embankment section. In some instances, granular or rock embankment will be required for embankment construction for stability purposes, but this special provision does not prevent the use of soil when appropriate. Refer to the plans for specific details regarding material requirements for embankment construction.

Place and compact granular or cohesive pile core, soil, granular or rock embankment, and structure granular backfill according to the applicable density requirements for the project. When constructing granular or rock embankments, use granular pile core for driven pile foundations and use cohesive pile core for pre-drilled pile or drilled shaft foundations. Place geotextile fabric, Type IV between cohesive pile core and structure

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granular backfill and granular or rock embankment.

When granular or rock embankment is required for embankment construction, conform to the general requirements of Subsection 206.03.02 B). In addition, place the material in no greater than 2-foot lifts and compact with a vibrating smooth wheel roller capable of producing a minimum centrifugal force of 15 tons. Apply these requirements to the full width of the embankment for a distance of half the embankment height or 50 feet, whichever is greater, as shown on Standard Drawing RGX-105.

When using granular pile core, install 8-inch perforated underdrain pipe at or near the elevation of the original ground in the approximate locations depicted on the standard drawing, and as the Engineer directs, to ensure positive drainage of the embankment. Wrap the perforated pipe with a fabric of a type recommended by the pipe manufacturer.

After constructing the embankment, excavate for the end bent cap, drive piling or install shafts, place the mortar bed, construct the end bent, and complete the embankment to finish grade according to the construction sequence shown on the Plans or Standard Drawings and as specified hereinafter.

Certain projects may require widening of existing embankments and the removal of substructures. Construct embankment according to the plans. Substructure removal shall be completed according to the plans and Section 203. Excavation may be required at the existing embankment in order to place the structure granular backfill as shown in the Standard Drawings.

After piles are driven or shafts installed (see design drawings), slope the bottom of the excavation towards the ends of the trench as noted on the plans for drainage. Using a separate pour, place concrete mortar, or any class concrete, to provide a base for forming and placing the cap. Place side forms for the end bent after the mortar has set sufficiently to support workmen and forms without being disturbed.

Install 4-inch perforated pipe in accordance with the plans and Standard Drawings. In the event slope protection extends above the elevation of the perforated pipe, extend the pipe through the slope protection.

After placing the end bent cap and removing adjacent forms, fill the excavation with structure granular backfill material to the level of the berm prior to placing beams for the bridge. For soil embankments, place Type IV geotextile fabric between embankment material and structure granular backfill. After completing the end bent backwall, or after completing the span end wall, place the structure granular backfill to subgrade elevation. If the original excavation is enlarged, fill the entire volume with compacted structure granular backfill at no expense to the Department. Do not place backfill before removing adjacent form work. Place structure granular backfill material in trench ditches at the ends of the excavation. Place Geotextile Fabric, Type IV over the surface of structure granular backfill prior to placing aggregate base course.

Tamp the backfill with hand tampers, pneumatic tampers, or other means the Engineer approves. Thoroughly compact the backfill under the overhanging portions of the structure to ensure that the backfill is in intimate contact with the sides of the structure.

Do not apply seeding, sodding, or other vegetation to the exposed granular embankment.

3.2 Special Construction Methods. Erodible or unstable materials may erode even when protected by riprap or channel lining; use the special construction method described below when using these materials.

Use fine aggregates or friable sandstone granular embankment at "dry land" structures only. Do not use them at stream crossings or locations subject to flood waters. For erodible or unstable materials having 50 percent or more passing the No. 4 sieve, protect with geotextile fabric. Extend the fabric from the original ground to the top of slope over the entire area of the embankment slopes on each side of, and in front of, the

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end bent. Cover the fabric with at least 12 inches of non-erodible material.

For erodible or unstable materials having less than 50 percent passing a No. 4 sieve, cover with at least 12 inches of non-erodible material.

Where erodible or unstable granular embankment will be protected by riprap or channel lining, place geotextile fabric between the embankment and the specified slope protection.

4.0 MEASUREMENT.

4.1 Granular Embankment. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment any Granular Embankment that is not called for in the plans.

The Department will not measure for payment any special construction caused by using erodible or unstable materials and will consider it incidental to the Granular Embankment regardless of whether the erodible or unstable material was specified or permitted.

- **4.2 Rock Embankment.** The Department will not measure for payment any rock embankment and will consider it incidental to roadway excavation or embankment in place, as applicable. Rock embankments will be constructed using granular embankment on projects where there is no available rock present within the excavation limits of the project.
- **4.3 Granular Pile Core.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment furnishing and placing 8-inch perforated underdrain pipe and will consider it incidental to the Granular pile core. The Department will not measure for payment any granular pile core that is necessary because the contractor elects to use granular or rock embankment when it is not specified in the plans.
- **4.4 Cohesive Pile Core**. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204.
- **4.5 Structure Granular Backfill.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure any additional material required for backfill outside the limits shown on the Plans and Standard Drawings for payment and will consider it incidental to the work.

The Department will not measure structure excavation at the end bent or an existing embankment for payment and will consider it incidental to Structure Granular Backfill.

The Department will not measure for payment the 4-inch perforated underdrain pipe and will consider it incidental to the Structure Granular Backfill.

- **4.6 Geotextile Fabric.** The Department will measure the quantities as specified in Section 214. The Department will not measure the quantity of fabric used for separating granular or rock embankment and cohesive pile core and will consider it incidental to cohesive pile core.
 - **4.7 End Bent.** The Department will measure the quantities according to the

Contract. The Department will not measure furnishing and placing the 2-inch mortar or concrete bed for payment and will consider it incidental to the end bent construction.

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
20209EP69	Granular Pile Core	Cubic Yards
20210EP69	Cohesive Pile Core	Cubic Yards
02231	Structure Granular Backfill	Cubic Yards
02596, 02599	Geotextile Fabric, Type	See Section 214

The Department will consider payment as full compensation for all work required in this provision.

June 15, 2012

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY130103 01/04/2013 KY103

Superseded General Decision Number: KY20120128

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

 $\begin{array}{ccc} \text{Modification Number} & \text{Publication Date} \\ & 0 & 01/04/2013 \end{array}$

* SUKY2010-164 07/12/2010

	Rates	Fringes
BRICKLAYER	.\$ 22.90	8.50
CARPENTER Carpenter Piledriverman CEMENT MASON/CONCRETE FINISHER	.\$ 21.05	8.50 8.50 8.50
When required to work from bost subject to direct fall, escept trucks up to 75 feet: Add 25% to and 50% over 75 feet.	um chairs on bri when using JLG'	s and bucket
IRONWORKER	.\$ 24.99	18.22
LABORER (01) General Laborer, Flagman, Steam Jenny (02) Batch Truck Dumper, Deck Hand or Scow Man, Hand Blade Operator		8.50 8.50
(03) Power Driven Tool Operator: Wagon Drill, Chain Saw, Sand Blaster, Concrete Chipper, Pavement Breaker, Vibrator, Power Wheelbarrow, Power Buggy, Sewer Pipe Layer, Bottom		

Men, Dry Cement Handler,		
Concrete Rubber, Mason		
Tender\$	19.80	8.50
(04) Asphalt Lute and		
Rakerman, Side Rail Setter\$	19.85	8.50
(05) Gunnite Nozzxleman,		
Gunnite Operator\$	19.95	8.50
(06) Tunnel Laborer (Free		
Air)\$	20.00	8.50
(07) Tunnel Mucker (Free		
Air)\$	20.05	8.50
(08) Tunnel Miner, Blaster		
and Driller (free Air)\$		8.50
(09) Caisson Worker\$		8.50
(10) Powderman\$	21.05	8.50
(11) Drill Operator of		
Percussion Type Drills		
powered and propelled by	22 25	8.50
an independent air supply\$	22.25	8.50
PAINTER		
All Excluding Bridges\$	19.92	9.57
Bridges\$		10.07
PLUMBER\$	22.52	7.80
POWER EQUIPMENT OPERATOR:		
GROUP 1\$		8.50
GROUP 2\$		8.50
GROUP 3\$		8.50
GROUP 4\$		8.50
POWER EQUIPMENT OPERATOR CLASSIF	CATIONS:	

GROUP 1: Auto Patrol, Batcher Plant, Bituminous Paver, Cable-Way, Clamshell, Concrete Mixer (21 cu ft or over), Concrete Pump, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching machine, Dragline, Dredge Engineer, Elevating Grader and all types of Loaders, Hoe-type Machine, Hoisting Engine, Locomotive, LeTourneau or carry-all scoop, Bulldozer, Mechanic, Orangepeel Bucket, Piledriver Operator, Power Blade, Roller (Bituminous), Roller (earth), Roller (Rock), Scarifier, Shovel, Tractor Shovel, Truck Crane, Well Point, Winch Truck, Push Dozer, Grout Pump, High Lift, Fork Lift (regardless of lift height), all types of Boom Cats, Multiple Operator, Core Drill, Tow or Push Boat, A-Frame Winch Truck, Concrete Paver, Grade-All, Hoist, m Hyster, Material Pump, Pumpcrete, Ross Carrier, Sheepfoot, Sideboom, Throttle-Valve man, Rotary Drill, Power Generator, Mucking Machine, Rock Spreader attached to Equipment, Scoopmobile, KeCal Loader, Tower Cranes, Hydrocrane, Tugger, Backfiller Gurries, Self-propelled Compactor, Self-Contained Hydraulic Percussion Drill

GROUP 2: All Air Compressors (200 cu ft/min or greater), Bituminous Mixer, Concrete Mixer (under 212 cu ft), Welding Machine, Form Grader, Tractor (50 hp and over), Bull Float, Finish Machine, Outboard Motor Boat, Brakeman, Mechanic Tender, Whirly Oiler, Tract-air, Road Widening Trencher, Articulating Trucks

GROUP 3: Greaser on Grease Facilities servicing Heavy

Equipment

GROUP 4: Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Pump, Tamping Machine, Tractor (under 50 hp), Vibrator, Oiler, Air Compressor (under 200 cu ft per minute), Concrete Saw, Burlap and Curing Machine, Hydro Seeder, Power Form Handling Equipment, Deckhand Oiler, hydraulic Post Driver

SHEET METAL WORKER\$	20.40	7.80
TRUCK DRIVER		
(01) Truck Tender and		
Warehouseman\$	19.70	8.50
(02) Driver, Winch Truck		
and A-Frame when used in		
Transporting Materials\$	19.80	8.50
(03) Driver (Semi-trailer		
or Pole Trailer), Driver		
(Dump Truck, Tandem Axle),		
Driver of Distributor\$	19.90	8.50
(04) Driver on Mixer		
Trucks (all types)\$		8.50
(05) Truck Mechanic\$	20.00	8.50
(06) Driver (3 tons and		
under), Tire Changer,	00.00	0 50
Truck Mechanic Tender\$	20.03	8.50
(07) Driver on Pavement	20.05	8.50
Breakers\$	20.05	8.50
(08) Driver (over 3 tons), Driver (Truck Mounted		
Rotary Drill)\$	20. 24	8.50
(09) Driver, Euclid and	20.24	0.30
other Heavy Earth Moving		
Equipment\$	20 81	8.50
(10) Greaser on greasing	20.01	0.50
facilities\$	20.90	8.50

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted

because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determ	ination	No.	CR-1	3-	11-	HW	/Y	7

Project No. Highway

Date of Determination: April 15, 2013

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-13-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the <u>Kentucky Transportation Cabinet</u>. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations adopted by the Commissioner of the Department of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Michael Donta, Deputy Commissioner

Department of Workplace Standards

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CLASSIFICATIONS	RATE AND FRINGE BENEFITS
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94
BRICKLAYERS: Bricklayers:	BASE RATE \$22.90 FRINGE BENEFITS 8.50
Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50
CARPENTERS: Carpenters:	BASE RATE \$24.15 FRINGE BENEFITS 13.50
Piledrivers:	BASE RATE \$23.80 FRINGE BENEFITS 13.50
CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50
ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55

*When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to a direct fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

IRONWORKERS:	BASE RATE FRINGE BENEFI	\$ 26.34 TS 18.84
GROUNDSMAN:	*BASE RATE FRINGE BENEFITS	\$17.79 8.51
EQUIPMENT OPERATOR:	*BASE RATE FRINGE BENEFITS	\$26.90 10.31
LINEMAN:	*BASE RATE FRINGE BENEFITS	\$30.09 10.94

RATE AND FRINGE BENEFITS

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LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup:

HEAVY & HIGHWAY BASE RATE \$21.15 FRINGE BENEFITS 11.41

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers – nuclear, radiation, toxic and hazardous waste – Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers – laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

HEAVY & HIGHWAY BASE RATE \$21.40 FRINGE BENEFITS 11.41

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters:

HEAVY & HIGHWAY BASE RATE \$21.45 FRINGE BENEFITS 11.41

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized:

HEAVY & HIGHWAY BASE RATE \$22.05 FRINGE BENEFITS 11.41

OPERATING ENGINEERS:

Group A-1:

NCCCO or OECP Certified; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane:

BASE RATE \$28.40 FRINGE BENEFITS 13.40

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

Group A:

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earth), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheepfoot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller gurries, self-propelled compactor, self-contained hydraulic percussion drill:

BASE RATE \$27.35 FRINGE BENEFITS 13.40

Group B:

All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirly oiler, tractair and road widening trencher, articulating trucks:

BASE RATE \$24.87 FRINGE BENEFITS 13.40

Group B2:

Greaser on grease facilities servicing heavy equipment:

BASE RATE

\$25.26

FRINGE BENEFITS 13.40

Group C:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver:

	BASE RATE FRINGE BENEFITS	\$24.60 13.40
PAINTERS: All Excluding Bridges:	BASE RATE FRINGE BENEFITS	\$19.92 9.57
Bridges:	BASE RATE FRINGE BENEFITS	\$23.92 10.07

CLASSIFICATIONS	RATE AND FRINGE BENEFITS
PLUMBERS:	BASE RATE \$22.52 FRINGE BENEFITS 7.80
SHEET METAL:	BASE RATE \$20.40 FRINGE BENEFITS 7.80
TRUCK DRIVERS:	
Truck helper and warehouseman:	BASE RATE \$22.45 FRINGE BENEFITS 13.50
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE \$22.55 FRINGE BENEFITS 13.50
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE \$22.65 FRINGE BENEFITS 13.50
Driver on mixer trucks (all types):	BASE RATE \$22.70 FRINGE BENEFITS 13.50
Truck mechanic:	BASE RATE \$22.75 FRINGE BENEFITS 13.50
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE \$22.78 FRINGE BENEFITS 13.50
Driver on pavement breakers:	BASE RATE \$22.80 FRINGE BENEFITS 13.50
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE \$22.99 FRINGE BENEFITS 13.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE \$23.56 FRINGE BENEFITS 13.50
Greaser on greasing facilities:	BASE RATE \$23.65 FRINGE BENEFITS 13.50

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-13-II- HWY dated April 15, 2013.

<u>NOTE:</u> Both Kentucky Determination No. CR-13-II-HWY and Federal Decision No. KY130103 apply to this project. Both sets of wage rates are included. If there is a difference in the two wages for the same classification, the Contractor is required to pay the higher of the two listed wages.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Ryan Griffith, Acting Director Division of Construction Procurement Frankfort, Kentucky 40622

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Powell County.

PART IV

INSURANCE

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INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

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PROPOSAL BID ITEMS

Report Date 0/31/13

Section: 0001 - PAVING

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRICEFP	AMOUNT
0010	00001	DGA BASE	2,123.00	TON	\$	
0020	00020	TRAFFIC BOUND BASE	130.00	TON	\$	
0030	00078	CRUSHED AGGREGATE SIZE NO 2	1,340.00	TON	\$	
0040	00100	ASPHALT SEAL AGGREGATE	23.00	TON	\$	
0050	00103	ASPHALT SEAL COAT	2.80	TON	\$	
0060	00190	LEVELING & WEDGING PG64-22	345.00	TON	\$	
0070	00212	CL2 ASPH BASE 1.00D PG64-22	1,289.00	TON	\$	
0800	00301	CL2 ASPH SURF 0.38D PG64-22	365.00	TON	\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY		UNIT PRICEFP	AMOUNT
0090	01000	PERFORATED PIPE-4 IN	550.00	LF	\$	
0100	01010	NON-PERFORATED PIPE-4 IN	100.00	LF	\$	
0110	01020	PERF PIPE HEADWALL TY 1-4 IN	4.00	EACH	\$	
0120	01310	REMOVE PIPE	22.00	LF	\$	
0130	01891	ISLAND HEADER CURB TYPE 2	25.00	LF	\$	
0140	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	16.00	EACH	\$	
0150	02014	BARRICADE-TYPE III	2.00	EACH	\$	
0160	02159	TEMP DITCH	1,055.00	LF	\$	
0170	02160	CLEAN TEMP DITCH	1,055.00	LF	\$	
0180	02200	ROADWAY EXCAVATION	1,172.00	CUYD	\$	
0190	02242	WATER	50.00	MGAL	\$	
0200	02262	FENCE-WOVEN WIRE TYPE 1	108.00	LF	\$	
0210	02351	GUARDRAIL-STEEL W BEAM-S FACE	387.50	LF	\$	
0220	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH	\$	
0230	02367	GUARDRAIL END TREATMENT TYPE 1	3.00	EACH	\$	
0240	02371	GUARDRAIL END TREATMENT TYPE 7	4.00	EACH	\$	
0250	02381	REMOVE GUARDRAIL	650.00	LF	\$	
0260	02397	TEMP GUARDRAIL	925.00	LF	\$	
0270	02429	RIGHT-OF-WAY MONUMENT TYPE 1	8.00	EACH	\$	
0280	02432	WITNESS POST	8.00	EACH	\$	
0290	02484	CHANNEL LINING CLASS III	1,604.00	TON	\$	
0300	02545	CLEARING AND GRUBBING1.0 ACRES	1.00	LS	\$	
0310	02562	TEMPORARY SIGNS	366.00	SQFT	\$	
0320	02596	FABRIC-GEOTEXTILE TYPE I	478.00	SQYD	\$	
0330	02599	FABRIC-GEOTEXTILE TYPE IV	5,243.00	SQYD	\$	
0340	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS	\$	
0350	02651	DIVERSIONS (BY-PASS DETOURS)	1.00	LS	\$	
0360	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS	\$	
0370	02677	ASPHALT PAVE MILLING & TEXTURING	45.00	TON	\$	
0380	02701	TEMP SILT FENCE	1,970.00	LF	\$	
0390	02704	SILT TRAP TYPE B	6.00	EACH	\$	
0400	02705	SILT TRAP TYPE C	6.00	EACH	\$	
0410	02707	CLEAN SILT TRAP TYPE B	6.00	EACH	\$	
0420	02708	CLEAN SILT TRAP TYPE C	6.00	EACH	\$	

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PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICEFP	AMOUNT
0430	02709		CLEAN TEMP SILT FENCE	1,970.00	LF	\$	
0440	02726		STAKING	1.00	LS	\$	
0450	02731		REMOVE STRUCTURE	1.00	LS	\$	
0460	05950		EROSION CONTROL BLANKET	2,097.00	SQYD	\$	
0470	05952		TEMP MULCH	4,900.00	SQYD	\$	
0480	05953		TEMP SEEDING AND PROTECTION	4,900.00	SQYD	\$	
0490	05966		TOPDRESSING FERTILIZER	.32	TON	\$	
0500	05985		SEEDING AND PROTECTION	4,900.00	SQYD	\$	
0510	06510		PAVE STRIPING-TEMP PAINT-4 IN	4,000.00	LF	\$	
0520	06514		PAVE STRIPING-PERM PAINT-4 IN	4,800.00	LF	\$	
0530	06588		PAVEMENT MARKER TY IVA-BY TEMP	38.00	EACH	\$	
0540	22000ED		WOOD PLANK FENCE	207.00	LF	\$	
0550	22045NN		FLUME INLET TY 2-MOD	1.00	EACH	\$	
0560	23542EC		ENHANCED SILT TRAP	3.00	EACH	\$	
0570	23545EC		CLEAN ENHANCED SILT TRAP	3.00	EACH	\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICEFP	AMOUNT
0580	00440		ENTRANCE PIPE-15 IN	68.00	LF	\$	
0590	00443		ENTRANCE PIPE-24 IN	32.00	LF	\$	
0600	00464		CULVERT PIPE-24 IN	33.00	LF	\$	
0610	01208		PIPE CULVERT HEADWALL-24 IN	1.00	EACH	\$	
0620	01380		METAL END SECTION TY 2-15 IN	2.00	EACH	\$	
0630	01451		S & F BOX INLET-OUTLET-24 IN	3.00	EACH	\$	
0640	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	44.00	SQYD	\$2.00 \$	\$88.00

Section: 0004 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE FP	AMOUNT
0650	02231		STRUCTURE GRANULAR BACKFILL	176.00	CUYD	\$	
0660	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF	\$	
0670	02998		MASONRY COATING	288.00	SQYD	\$	
0680	03299		ARMORED EDGE FOR CONCRETE	69.20	LF	\$	
0690	08019		CYCLOPEAN STONE RIP RAP	378.00	TON	\$	
0700	08033		TEST PILES	31.00	LF	\$	
0710	08046		PILES-STEEL HP12X53	150.00	LF	\$	
0720	08094		PILE POINTS-12 IN	14.00	EACH	\$	
0730	08100		CONCRETE-CLASS A	46.00	CUYD	\$	
0740	08104		CONCRETE-CLASS AA	133.80	CUYD	\$	
0750	08151		STEEL REINFORCEMENT-EPOXY COATED	30,205.00	LB	\$	
0760	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	175.00	LF	\$	
0770	23981EC		PPC I-BEAM TYPE HN42-49	372.00	LF	\$	

Section: 0005 - WATERLINE AND SEWERLINE

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PROPOSAL BID ITEMS

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LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRICEFP	AMOUNT
0780	01061	STEEL ENCASEMENT PIPE-4 IN	90.00	LF	\$	
0790	01069	STEEL ENCASEMENT PIPE-12 IN	32.00	LF	\$	
0800	03378	PVC PIPE-1 1/2 IN	190.00	LF	\$	
0810	03385	PVC PIPE-6 IN	840.00	LF	\$	
0820	03466	TIE-IN 6 IN	5.00	EACH	\$	
0830	03479	TIE-IN	1.00	EACH	\$	
0840	03526	GATE VALVE-6 IN	2.00	EACH	\$	
0850	20135ND	CASING SPACERS	50.00	EACH	\$	
0860	20136ND	CASING END SEALS	6.00	EACH	\$	
0870	20481EC	CREEK CROSSING	100.00	LF	\$	
0880	21998NN	SITE RESTORATION	1.00	LS	\$	
0890	22961ND	CASING SPACERS-INSTALL	50.00	EACH	\$	
0900	22962ND	CASING END SEALS-INSTALL	6.00	EACH	\$	
0910	22984EN	PVC FORCE MAIN-6 IN	900.00	LF	\$	
0920	24482ED	BYPASS METER ASSEMBLY	1.00	EACH	\$	

Section: 0006 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRICEFP	AMOUNT
0930	02569	DEMOBILIZATION	1.00	LS	\$	